

In the Matter of:)
)
Application for Certification) Docket No.
for Small Power Plant Exemption) 04-SPPE-01
Riverside Energy Resource Center)
)

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

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John L. Geesman, Associate Member

HEARING OFFICER and ADVISERS PRESENT

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Tim Tutt, Adviser

STAFF and CONSULTANTS PRESENT

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City of Riverside

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Adams, Broadwell, Joseph & Cardozo
California Unions for Reliable Energy

ALSO PRESENT

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Public Works Department, Water Quality Control
Plant
City of Riverside

ALSO PRESENT

Steven Badgett, Assistant Director
Public Utilities Department
City of Riverside

Karl Lany
SCEC Air Quality Specialists

Camille Sears

Petra Pless

J. Phyllis Fox
Environmental Management

Mohsen Nazemi, Assistant Deputy Executive Officer
South Coast Air Quality Management District

Jeffrey J. Johnston
LOR Geotechnical Group

Gary Doyal, Superintendent
The Industrial Company, TIC

Mary Humboldt

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P R O C E E D I N G S

9:05 a.m.

HEARING OFFICER FAY: Good morning.

Will the hearing please come to order. This is our effort to continue taking evidence in the Riverside Energy Resource Center SPPE case. And today we will be dealing with air quality.

What we'd like to do, as I discussed with counsel for the various parties, is handle construction impacts entirely and complete that by all parties. Then go back and look at operation impacts.

So, now I'd like to know if there's any preliminary matters, if people have any concerns or questions?

MR. THOMPSON: Mr. Fay and Commissioners, we have two preliminary matters. One is we would like to put on very briefly Stephen Schultz, who is the wastewater systems manager, to comment on the CURE -- CURE has a section in their testimony called operational impacts that are cumulatively significant, and they talk about his wastewater treatment plant.

And we would like to offer up his comments on that. That would be very brief.

1 The second is we would like to put back
2 on Stephen Badgett to testify to a letter that was
3 signed yesterday that we would like to put in the
4 record.

5 HEARING OFFICER FAY: And what does that
6 relate to?

7 MR. THOMPSON: The letter relates to an
8 agreement by the owners of the Kennel, to vacate
9 the property during -- partially vacate the
10 property during the construction period.

11 HEARING OFFICER FAY: Okay. Anything
12 further?

13 MR. THOMPSON: No, but we will agree to
14 the dividing of the air quality between
15 construction and operation.

16 HEARING OFFICER FAY: Ms. DeCarlo, any
17 preliminary matters?

18 MS. DeCARLO: No, none from staff.

19 HEARING OFFICER FAY: Okay. Mr. Joseph?

20 MR. JOSEPH: No, but I will say I'm not
21 thrilled by last minute surprises. That's not how
22 this is supposed to work, but we're happy to hear
23 any new evidence.

24 HEARING OFFICER FAY: Well, why don't we
25 go ahead and hear what it is and if you have

1 objections you can detail them at that time.

2 All right. Mr. Thompson, are you ready
3 to go ahead with your case regarding construction
4 impacts?

5 MR. THOMPSON: We are, thank you very
6 much. Applicant would like to call Mr. Stephen
7 Schultz.

8 HEARING OFFICER FAY: I believe the
9 witness needs to be sworn.

10 Whereupon,

11 STEPHEN SCHULTZ
12 was called as a witness herein, and after first
13 having been duly sworn, was examined and testified
14 as follows:

15 DIRECT EXAMINATION

16 BY MR. THOMPSON:

17 Q Mr. Schultz, would you please state your
18 name and position for the record?

19 A Stephen Schultz; I'm the Wastewater
20 Systems Manager for the City of Riverside.

21 Q And what are your duties and
22 responsibilities in that position?

23 A I'm responsible for oversight of the
24 wastewater treatment plant that's within the City;
25 the collection system that's within the City; and

1 also a closed landfill that we have.

2 Q Staff, in their testimony, and I will --
3 do you have a copy of staff -- I'm sorry, CURE, in
4 its testimony, refers to the construction impacts
5 from the wastewater treatment facility. Do you
6 have that testimony in front of you?

7 A I believe I do, yes.

8 Q Would you tell us when or if permits
9 have been obtained for this construction program?

10 A Currently we're using an existing permit
11 to construct.

12 Q And do you have any comments on the
13 bullet points on page 41 of CURE's testimony that
14 describe components of this construction program?

15 A Yes, I do. Part of the responsibility
16 in our serving clients within our service area is
17 that we have to insure that there's adequate
18 capacity over time. We have to insure that the
19 equipment is effectively operating. And then we
20 have to carry out EPA, Environmental Protection
21 Agency permit requirements for the facility,
22 itself.

23 And the bullet points that I see in
24 front of me appear to have come out of our capital
25 improvement program. And the first one talks

1 about upgrades, treatment, efficiency, reducing
2 system maintenance and increasing plant capacity,
3 which is exactly right.

4 Over time -- we don't have -- we have a
5 dynamic system -- our service area will continue
6 to grow. We move people off of septic tanks, so
7 in effect we have to plan in the future for
8 additional capacity that may be coming into the
9 facility, itself.

10 Again, permit requirements, federal
11 mandates require that we plan for that. And
12 that's my responsibility within the City is to
13 insure that this planning takes place.

14 There is equipment, over time, that's
15 needed to be replaced. And that's a part of the
16 capital improvement program. Mostly for
17 equipment, life cycle, and not so much for
18 necessarily capacity on everything.

19 There's a bullet in here about the waste
20 gas flaring system. We are going to be replacing
21 that this year, and the reason for that is that we
22 need to meet our AQMD, Air Quality Management
23 District, requirements. And our current system is
24 aging, and not as effective as it could be.

25 And as far as increased flaring

1 capacity, as we increase our service area we
2 produce more solids. When we produce more solids
3 we produce more gas.

4 As long as our generating system is
5 running we're using all the gas available. But
6 when it shuts down we have to be able to flare
7 this source. We can't just let it vent to the
8 atmosphere. So, we have to prepare for increased
9 gas capacity that's going to take place.

10 They talked about a cooling tower
11 structure replacement. That is due to the aging
12 conditions. There's no intent at this time to
13 increase generating capacity there.

14 Construction of the secondary
15 clarifiers, that's a potential planning that's
16 underway right now. However, we have some
17 opportunities that may require that we do not
18 expand the secondaries, and that can be done
19 through some newer technology, microfiltration, et
20 cetera. So this is something that's on the books
21 right now, but it's not something that we're
22 actually planning to do in the very near future.

23 And then our collection system, yes, we
24 have an aging collection system that has a lot of
25 bottlenecks in it. Meaning that we can't

1 necessarily effectively and reliably meet peak
2 demands at certain times, so we're doing
3 construction projects there.

4 And then, as need, as our service area
5 has the potential to grow, that we will have the
6 capacity to route that flow to the facility,
7 itself. So, yes, we are planning to do that.

8 Q Are there, in your opinion, significant
9 environmental impacts from construction of any of
10 these projects likely within the next six or eight
11 months?

12 A These particular projects here? No.

13 Q Thank you.

14 MR. THOMPSON: Mr. Schultz is tended for
15 cross-examination.

16 HEARING OFFICER FAY: Ms. DeCarlo, any
17 questions?

18 MS. DeCARLO: Just one question.

19 CROSS-EXAMINATION

20 BY MS. DeCARLO:

21 Q Is it true that flaring is performed
22 only when the generating system is down or other
23 upset conditions will occur?

24 A I'm sorry, flaring occurs only when the
25 generators are down. Yes, at this time.

1 Q Okay, thank you.

2 HEARING OFFICER FAY: All right, Mr.
3 Joseph, do you have any questions?

4 MR. JOSEPH: Yes.

5 CROSS-EXAMINATION

6 BY MR. JOSEPH:

7 Q Mr. Schultz, are you an expert on air
8 quality?

9 A No, I'm not.

10 MR. JOSEPH: That's all the questions I
11 have, thank you. I'm happy with his testimony.

12 HEARING OFFICER FAY: Okay. Anything
13 further, Mr. Thompson?

14 MR. THOMPSON: No, nothing further.

15 HEARING OFFICER FAY: All right. Thank
16 you, Mr. Schultz, you're excused.

17 MR. THOMPSON: Recall Mr. Stephen
18 Badgett, who has been sworn.

19 HEARING OFFICER FAY: Okay.
20 Whereupon,

21 STEPHEN BADGETT
22 was recalled as a witness herein, and having been
23 previously duly sworn, was examined and testified
24 further as follows:
25 //

1 DIRECT EXAMINATION

2 BY MR. THOMPSON:

3 Q Mr. Badgett, I have in my hand a letter
4 written to you from Paul and Peggy Doiron -- maybe
5 you could help me with the pronunciation?

6 A Doiron.

7 Q -- Doiron.

8 MR. THOMPSON: If we could have this
9 marked as the next exhibit in order?

10 HEARING OFFICER FAY: That will be
11 exhibit 21.

12 BY MR. THOMPSON:

13 Q You are the addressee of this letter
14 from Paul and Peggy Doiron, is that correct?

15 A That's correct.

16 Q And when was this letter signed?

17 A Yesterday evening.

18 Q And it was signed in your presence?

19 A Yes, it was.

20 Q And is it true that Mr. Lany will refer
21 to this letter in a discussion that he is likely
22 to have on the nearest sensitive receptor?

23 A That is my understanding.

24 Q Thank you.

25 MR. THOMPSON: Mr. Badgett is tendered

1 for cross-examination.

2 HEARING OFFICER FAY: Ms. DeCarlo, any
3 questions?

4 MS. DeCARLO: No questions.

5 HEARING OFFICER FAY: Mr. Joseph?

6 MR. JOSEPH: A moment, please, I'm still
7 reading the letter. I said, just a moment,
8 please, I'm still reading the letter.

9 HEARING OFFICER FAY: Oh, certainly.

10 (Pause.)

11 MS. DeCARLO: Actually, Mr. Fay, I do
12 have one question.

13 HEARING OFFICER FAY: All right, why
14 don't you go ahead.

15 MS. DeCARLO: Okay.

16 CROSS-EXAMINATION

17 BY MS. DeCARLO:

18 Q The four hours identified in the letter,
19 would that occur during the proposed construction
20 schedule of 7:00 to 4:00?

21 A I'm sorry, did you say proposed
22 construction schedule or post-construction
23 schedule? I'm sorry.

24 Q Proposed.

25 A Proposed. Yes, it will.

1 Q Okay.

2 HEARING OFFICER FAY: Is that all?

3 MS. DeCARLO: Yes, that's all from
4 staff.

5 (Pause.)

6 MR. JOSEPH: No questions, Mr. Fay.

7 HEARING OFFICER FAY: Okay, thank you.

8 All right, any questions from the Committee?

9 Thank you, Mr. Badgett.

10 Why don't you go ahead then with your
11 case-in-chief on the construction impacts.

12 MR. THOMPSON: Thank you. Applicant
13 would like to call Mr. Karl Lany.

14 Whereupon,

15 KARL LANY

16 was called as a witness herein, and after first
17 having been duly sworn, was examined and testified
18 as follows:

19 DIRECT EXAMINATION

20 BY MR. THOMPSON:

21 Q Would you please state your name and
22 place of employment for the record.

23 A Karl Lany with SCEC Air Quality
24 Specialists.

25 Q And would you briefly describe your

1 responsibilities with regard to the Riverside
2 Energy Resource Center.

3 A We are retained by the City as a
4 subcontractor to assist with the air quality
5 permitting for the project, starting with the
6 permitting application to South Coast for the
7 operation of the project.

8 And then evolving into the application
9 for SPPE to the CEC.

10 We conducted the emissions inventories,
11 the analysis, the regulatory analysis, and we have
12 taken an ongoing role in coordinating the
13 permitting agency, South Coast especially, in this
14 case, to insure that the application is understood
15 and that the District proceeded to process.

16 Q Are you the same Karl Lany that has
17 submitted prepared direct testimony with a number
18 of attachments previously in this proceeding?

19 A Yes, I am.

20 MR. THOMPSON: Mr. Fay, if I could have
21 this marked as an exhibit. I realize that I
22 goofed up yesterday and asked for an exhibit
23 number where the testimony was part of a larger
24 document. And having done that once, and having
25 an exhibit number assigned, I'm loathe to go back.

1 So I'll ask to burden the record with
2 individual exhibit numbers if that's all right?

3 HEARING OFFICER FAY: It's not a
4 problem. Mr. Lany's testimony will be exhibit 22.

5 BY MR. THOMPSON:

6 Q Mr. Lany, do you have exhibit 22 in
7 front of you?

8 A Yes, I do.

9 Q Do you have any corrections, additions
10 or deletions to make to that material?

11 A No, I do not.

12 Q If I were to ask you the questions
13 contained in exhibit 22 would your answers today,
14 under oath, be the same?

15 A Yes, they would.

16 MR. THOMPSON: I would like to hand out
17 and identify three exhibits, and I'll take them
18 one at a time, if that's acceptable.

19 (Pause.)

20 MR. THOMPSON: Mr. Fay, can I ask that
21 the single page titled, relevant construction
22 emissions, be identified as the next exhibit in
23 order, which I think is 23?

24 HEARING OFFICER FAY: That is exhibit
25 23.

1 MR. THOMPSON: Thank you.

2 BY MR. THOMPSON:

3 Q Mr. Lany, would you describe -- well,
4 first of all, did you prepare exhibit 23?

5 A Yes, I did.

6 Q And would you please describe what is
7 contained on that exhibit.

8 MR. JOSEPH: Mr. Fay, we're going to
9 object to this --

10 HEARING OFFICER FAY: Yes, Mr. Joseph.

11 MR. JOSEPH: -- to this line of
12 questioning. This page contains a whole series of
13 data which has never been presented before. The
14 applicant had an obligation to present its
15 testimony on August 13th so we would have a chance
16 to look at it and examine it ahead of time.

17 It's clearly lots of underlying
18 information that's summarized here, and we've had
19 absolutely no opportunity to review the accuracy
20 or relevance of any of this information.

21 HEARING OFFICER FAY: Do you have a
22 response, Mr. Thompson?

23 MR. THOMPSON: Well, we view these
24 proceedings as kind of an ongoing delving into the
25 truth and trying to get the best evidence

1 possible. Yesterday CURE passed out three
2 different documents and asked our witness to
3 identify them. And those were single pages out of
4 multipage documents.

5 We didn't object to that under the
6 belief that those presenting the evidence should
7 have some leeway in creating a more thorough
8 record.

9 So, I think using that guidance, it
10 should be admitted, because I do believe it helps
11 the record.

12 MR. JOSEPH: Mr. Fay, the documents that
13 we used yesterday were excerpts from pre-existing
14 documents which were publicly available, and the
15 witness acknowledge that he had consulted one of
16 them before.

17 This is the compilation of work that
18 Mr. Lany has done based on documents which are not
19 here. And there is absolutely no way for us to
20 test the accuracy or underlying facts that are
21 behind the data that's presented here.

22 HEARING OFFICER FAY: All right, the
23 objection is noted, but we're going to overrule it
24 and admit the evidence. But the witness is
25 admonished to clarify the source of this data.

1 And the parties can address the accuracy of this
2 in their briefs if they choose.

3 MR. JOSEPH: Mr. Fay, I'm also going to
4 ask for leeway to present additional evidence when
5 we've had a chance to go back and look at the
6 underlying documents, because there may or may not
7 be issues that are raised by this and underlying
8 facts which need to be in the record so as to put
9 this in proper light.

10 I have no idea at this point. It's
11 impossible for us to know --

12 HEARING OFFICER FAY: Certainly,
13 certainly. All right. Well, why don't we just
14 see where it goes. I understand your concern.

15 MR. THOMPSON: Let me try this, Mr. Fay.
16 I forgot to mention the isopleths that were
17 submitted late Friday by CURE, obviously giving no
18 one a chance to review whether or not the
19 underlying data that supported those was truly, as
20 I asked yesterday, using our assumptions.

21 And we did not object to that under the
22 belief that the record should be as complete as
23 possible.

24 But let me do this before I ask that you
25 admit this into evidence.

1 BY MR. THOMPSON:

2 Q Mr. Lany, would you please briefly
3 describe any efforts that you have made to try and
4 put the construction emissions of this project in
5 a context of other projects that you're familiar
6 with?

7 A That's exactly what this document
8 reflects. We have been building an emission
9 inventory for construction as data became
10 available to us. As the contractor was brought
11 onboard to give us guidance in understanding what
12 his operations will be as he starts earthmoving in
13 the project, as we have responded to comments from
14 CEC Staff and as we have responded to comments
15 from CURE.

16 Once we put together what we feel to be
17 a prudent and reasonable inventory I wanted the
18 sample to check basically, and we asked an
19 individual to go through and pull from the FIS
20 reports for a variety of recent projects that the
21 CEC has reviewed to determine in general what the
22 numbers are looking like for construction of these
23 various other projects, recognizing that they are
24 done by a variety of other consultants using their
25 own methodology, which may or may not be the

1 methodology we use.

2 But just to help me better understand
3 that the numbers that we're using in our inventory
4 are indeed prudent. And this reflects the
5 disturbed areas that are reflected in the FIS
6 reports. And the maximum daily emissions from
7 those reports.

8 Q Mr. Lany, you mentioned a database that
9 your company is compiling. And if that's true,
10 approximately how many projects are contained in
11 that database.

12 A We asked a subcontractor who's familiar
13 with the CEC permitting to do this for us. And he
14 guides us on other projects that we work on. And
15 this reflects 13 other projects.

16 Q And in your opinion are the construction
17 emissions from this project well within the bounds
18 of the other 13 projects?

19 A The average of the 13 projects -- we
20 normalized everything to a count per acre day
21 based upon the size of disturbed area. The
22 average count per day for each project's maximum
23 basis was 2.87 pounds per day.

24 Our compiled inventory is 3.21 pounds
25 per day based on what we submitted, of 41.9

1 pounds. And the medium value of these 13 cited
2 references is 3.2 pounds per day.

3 Q Mr. Lany, I would like to turn now to
4 the issue or to the concept of the nearest
5 sensitive receptor.

6 Is it your opinion that the Hidden
7 Valley Kennels located at 7297 Jurupa Avenue is
8 the nearest sensitive receptor to this project?

9 A No, it is not.

10 Q And would you state your reasons for
11 that conclusion?

12 A There are several reasons. The first is
13 the South Coast intent and South Coast definition
14 of a sensitive receptor. And basically what South
15 Coast does is call out those receptors who would
16 be especially vulnerable to the hazards of air
17 pollution. Typically we're talking about the
18 elderly, children or the unhealthy.

19 South Coast does consider residential
20 receptors when it considers sensitive receptors
21 for policy purposes, and it does so because it's
22 very difficult for a permitting agency to really
23 have control or an understanding of how land use
24 might change over time. And it's very important
25 when you look at a stationary source.

1 Relative to a construction site, though,
2 where the emission source is very temporary in
3 nature, it's very important to keep in mind what
4 sensitive is. A residential receptor, in itself,
5 is not sensitive.

6 There are several other reasons that we
7 do not feel that this is a sensitive receptor.
8 The first of which is this is not a residential
9 neighborhood. This is a nonconforming land use in
10 an industrial area. And it is a residence to this
11 person; they have chosen to do so because they
12 operate a commerce out of their home, a business
13 that they could not operate in a residential area.

14 The nature of that business, the kennel,
15 and their prior exposure to other operations,
16 specifically the earthgrading prior to this
17 project of the site, really gives a fair
18 indication that they are not sensitive in the
19 sense of what South Coast would consider
20 sensitive.

21 There is a third reason, or a third area
22 where the issue of sensitive comes into play. And
23 that is by definition for by application of South
24 Coast's recent voluntary localized significance
25 threshold. This is a threshold that South Coast

1 Governing Board adopted in October of 2003,
2 mandating that it is entirely voluntary to any
3 agency. And also mandating that the methodology
4 would be issued on pretty much a trial basis with
5 the understanding that it could come back to the
6 Governing Board this summer for review and
7 modification.

8 It has not yet come back to the
9 Governing Board for review. But the language in
10 the implementation of that specifies that a
11 specific voluntary standard, which is a 24-hour
12 exposure to particulate matter from construction
13 operations, of 10.4 mcg/cubic meter, specifies
14 that that should be applied to sensitive
15 receptors, by almost default a residential
16 receptor, because they don't have control who is
17 exposed to the construction operations 24 hours a
18 day.

19 This particular receptor is not exposed
20 24 hours a day. Part of the residence, itself,
21 even today without any agreement with the City, is
22 not there for eight hours during the operation
23 period, as it is. It's often gone.

24 Q But does exhibit 21, which was
25 identified this morning and admitted into

1 evidence, reinforce your opinion about the nearest
2 sensitive receptor?

3 A I don't know that it necessarily
4 reinforces it. I never had the opinion that it
5 truly was a sensitive receptor based on
6 definition. It reinforces, I guess, the
7 circumstances of the site that the receptor, who
8 is not sensitive, is really not exposed in the way
9 the District would suggest that it's a voluntary
10 standard being applied.

11 Q And exhibit 21 virtually assures that
12 the residents will not be there, at least part of
13 the time, during the construction period during
14 the construction day?

15 A That's correct. Our concern, if there
16 is a concern about construction, is that the
17 construction project lasts several months, but the
18 reality is that peak emissions occur during a
19 three-week period, as scheduled by the contractor.

20 Now, that three-week period really is
21 when they're doing scraping operations, where you
22 have the most opportunity for fugitive dust
23 emissions.

24 This basically says that this receptor,
25 number one, continues to not meet the definition

1 of sensitive receptor. But, number two, will not
2 be present during the construction, the whole of
3 the peak construction day.

4 Q Do you have the testimony of CURE's Dr.
5 Phyllis Fox and Dr. Petra Pless in front of you?

6 A Yes, I do.

7 Q Now I'm only going to burden the record
8 here with asking you a couple questions on the
9 first three or four pages of this document.

10 Would you please turn to page 1 of this
11 document.

12 A Yes.

13 Q In 1A, constructing the project would
14 violate the 24-hour PM10 CAAQS without even
15 considering existing violations. Do you have any
16 comment to make to the evidence that's presented
17 in that section?

18 A Yes. It is correct that the South Coast
19 Basin is already in violating of the PM standards.
20 There's no debate about that. It is an accepted
21 practice by EPA, by the South Coast District, that
22 that, in itself, does not preclude anyone from
23 allowing any emission increase.

24 The issue here with particulates is not
25 whether or not we are violating the standard. The

1 issue is does the project significantly add to the
2 violation of the standard.

3 Q And would that comment also apply to
4 section B on page 2?

5 A Yes. Again, the issue is is the impact
6 or the increase significant. Now, the only thing
7 that we have, you know, outside of CEC's
8 definition is, you know, the possibility of a
9 voluntary South Coast definition. South Coast
10 does not bind CEC to it, but it is this voluntary,
11 and in a test vote, standard of 10.4 mcg/cubic
12 meter at a sensitive receptor on a 24-hour basis.

13 Q In considering your views of section A
14 and B that we just looked at, what is your opinion
15 with regard to the project's violation of these
16 standards?

17 A At this point if this particular
18 standard were to be applied, the next residential
19 area or residential location that could
20 conceivably be a sensitive receptor is located --
21 we've identified three other nearby receptors,
22 approximately 1000 meters to the east and 1000
23 meters to the west and about 1000 meters to the
24 north.

25 Based on those receptors, the standards

1 allow emission increase of anywhere between five
2 to eight times what we have calculated for our
3 maximum daily.

4 Q So would I be correct, then, in your
5 opinion the proper standard is not the one
6 elucidated in A and B?

7 A Certainly not at this residence. And I
8 have to really defer to CEC and CEC's authority to
9 determine what is significant.

10 Q And -- I'm sorry, go ahead.

11 A Keeping in mind the voluntary nature of
12 the South Coast numbers that have been put out
13 here. And keeping in mind South Coast's self-
14 verification the lead agency has the authority to
15 establish other (inaudible).

16 Q Turning to page 3, section C,
17 constructing the project would contribute
18 substantially to a violation of annual PM10 CAAQS.
19 Do you have any comment on that annual standard
20 referred to?

21 A Yes, I do. The standard that we're
22 referring to, again, is a matter of what is a
23 substantial contribution. The number that you see
24 in testimony, and the number that has been thrown
25 around is a significance threshold that South

1 Coast included for permitting the stationary
2 sources in rule 1303, I believe.

3 Again, what we have to keep in mind is
4 the nature of the stationary source versus the
5 nature of the temporary construction source.

6 South Coast established a significance
7 threshold of 1 mcg on an annual average. Because
8 South Coast recognizes that neither the agency nor
9 the applicant has control over land use over the
10 life of a project, which could be 10, 20, 30, 70
11 to 80, 100 years. They recognize there is no
12 control.

13 Because of that prudence is warranted;
14 and the standard reflects that prudence. But,
15 this is not a stationary source we're talking
16 about. We're talking about a temporary, short-
17 term construction operation.

18 We do have a better understanding of
19 short-term end use. We understand how the --
20 occupying land in what capacity. So applying this
21 standard to a construction operation does not make
22 sense.

23 We conferred with South Coast about this
24 and asked them, because frankly we were noting its
25 conspicuous absence in the CEQA guidance and in

1 the October report package where they were talking
2 about localized thresholds relative to
3 construction operations.

4 And South Coast CEQA people advised us
5 that it is not the District's intent to apply the
6 1302 annual average increment threshold to
7 construction operations.

8 Q Thank you, Mr. Lany. Finally, or maybe
9 almost finally, CURE submitted what I've been
10 calling four isopleths, without really knowing
11 what an isopleth is, last Friday.

12 Have you had a chance to review those
13 four charts, whatever they are?

14 A Yes, I have.

15 Q Do you have any comment about what is
16 contained in those four pieces of information?

17 A CURE sent over four isopleths that are
18 intended to reflect our dispersion analysis and
19 the analysis that we have conducted, specifically
20 to incorporate the City's commitments to limit
21 construction operations to eight hours.

22 The prior analysis that we did included
23 a 12-hour schedule. So they have provided
24 isopleths identifying the annual 1 mcg increase
25 threshold that we just discussed. And how it

1 might be impacted by construction operations.

2 And they did that for 12 hours and 8
3 hours, and the same for the 24 voluntary standard
4 hour, the voluntary standard that we've been
5 discussing.

6 We understand that these reflect our
7 input. I honestly don't know that for sure. I
8 don't really have the capability to take a look at
9 their output at this point to confirm that it
10 reflects our output.

11 However, I think, while the isopleths,
12 themselves, don't look terribly surprising in
13 shape, I am questioning one of the file references
14 and wondering if there's a chance that the annual
15 standards reflect an emission inventory relative
16 to our maximum one-hour applies to the whole
17 project versus the average over the project. And
18 I, unfortunately, have no way of knowing.

19 But what the revised documents do show
20 is that even if you were to consider the 24-hour
21 voluntary standard that South Coast has offered at
22 the residential receptor that has been in question
23 until today. The exceedance doesn't exist, nor
24 does it exist at any other nearby residential
25 receptors.

1 The one-hour isopleth shows an area
2 covering land is that is really not occupied at
3 this point. Again, -- I'm sorry, I meant to say
4 the annual isopleth. That annual isopleth covers
5 land that's really not occupied. The closest
6 thing that comes to an occupied parcel of land is
7 some driveways and a couple of industrial lots.

8 Again, South Coast specifies that that
9 standard is not to be applied to a construction
10 operation.

11 Q Mr. Lany, let's assume for the moment
12 that CURE was able to incorporate our current
13 assumptions in these isopleths. Do the boundaries
14 of the isopleths come close to what you believe is
15 the closest sensitive receptor?

16 A No, they don't.

17 MR. THOMPSON: One more kind of
18 housekeeping, if I may. On August 9, 2004, we
19 submitted responses to CURE data requests 60 to
20 93. I don't believe those have been identified
21 for the record. These are all in the area of air
22 quality. If this is the appropriate time to get
23 an exhibit number for those?

24 HEARING OFFICER FAY: Are they all --
25 were they filed as one package?

1 MR. THOMPSON: They were filed as one
2 package.

3 HEARING OFFICER FAY: Okay, that'll be
4 exhibit 24. Would you repeat that, again?

5 MR. THOMPSON: These are responses to
6 CURE data requests set 4, numbers 60 to 93. And
7 they were filed on August 9, 2004.

8 I would like to move exhibits 22, 23 and
9 24 into the record.

10 HEARING OFFICER FAY: Is there
11 objection? Hearing none, --

12 MR. JOSEPH: Mr. Fay, --

13 HEARING OFFICER FAY: Yes.

14 MR. JOSEPH: Sorry, a little slow, I had
15 to flip the microphone on. We do object to
16 exhibit 23 at this time.

17 HEARING OFFICER FAY: Okay.

18 MR. JOSEPH: Perhaps after cross-
19 examination we can address the question again.

20 HEARING OFFICER FAY: I'm sorry, you can
21 what?

22 MR. JOSEPH: Perhaps after cross-
23 examination we can address the question of the
24 admissibility of this document again.

25 HEARING OFFICER FAY: All right, we'll

1 hold off on the admissibility of exhibit 23, and
2 receive into evidence exhibits 22 and 24.

3 And I can't recall if you moved exhibit
4 21?

5 MR. THOMPSON: I would certainly like to
6 if I didn't.

7 HEARING OFFICER FAY: That is admitted,
8 as well. Is the witness available for cross-
9 examination?

10 MR. THOMPSON: Yes. Mr. Karl Lany is
11 tendered for cross-examination.

12 HEARING OFFICER FAY: All right. Ms.
13 DeCarlo.

14 MS. DeCARLO: Just a few questions.

15 CROSS-EXAMINATION

16 BY MS. DeCARLO:

17 Q Did you include any emission controls to
18 the scraper drop emissions in the latest round of
19 emission calculations?

20 A There were several items where controls
21 were not included. They would include the scraper
22 drop did not include -- control factor.

23 Q So am I to conclude from that that the
24 emission calculations are over-estimated, then?

25 A Yes.

1 MS. DeCARLO: That's all.

2 HEARING OFFICER FAY: Okay. Mr. Joseph.

3 MR. JOSEPH: Thank you, Mr. Fay.

4 CROSS-EXAMINATION

5 BY MR. JOSEPH:

6 Q Good morning, Mr. Lany. My name is Marc
7 Joseph. I'd like you to look at what's been
8 marked as exhibit 23, please. Do you have that in
9 front of you?

10 A Yes, I do.

11 Q I'll start from the top line, that
12 refers to the Silicon Valley Power Pico project, I
13 take it?

14 A Yes.

15 Q At the site of the Pico project, what is
16 the silt content of the topsoil?

17 A I don't know.

18 Q At that same project is the list of
19 construction mitigation measures that were
20 required by the Commission identical to the list
21 proposed for this project?

22 A Our intent was to take a look at the
23 inventories, not any of the control measures.

24 Q So you don't know whether the mitigation
25 measures that produced these numbers are the same

1 or not?

2 A For that particular project, no.

3 Q Were scraper operations included in the
4 emission estimate for that project?

5 A I don't know.

6 Q And I take it you also don't know what
7 emission factor was used for scraper operations at
8 that project, if there were such?

9 A On that project, no.

10 Q If I were to ask you the same questions
11 for each of the other projects, other than this
12 project, would you be able to answer those
13 questions?

14 A We looked at, when we started this
15 project we were looking at the Modesto and MID
16 project. And we were seeing a lot of similarities
17 in methodology in assumed control the emissions,
18 into assumed moisture content and assumed silt
19 content.

20 Our purpose in doing this was to not
21 guide our analysis, but instead to help us insure
22 that our analysis was not off track.

23 Q Other than the Modesto project can you
24 identify the silt content of the topsoil in any of
25 the other projects?

1 A I recall looking at two projects in the
2 San Joaquin area, and Modesto being one of them.
3 And we were looking at very similar assumptions
4 for silt, moisture content, control emissions.

5 Q So did you identify a second project
6 besides Modesto?

7 A I remember an MEG, and an MID. It may
8 not be on this list, actually. It may have been
9 the Turlock.

10 Q Okay. Putting aside Modesto and
11 Turlock, can you tell me what emission factor was
12 used for scraper drop operations in any of the
13 other projects?

14 A No, I can't.

15 Q Do you have before you the supplemental
16 testimony by Mr. Will Walters?

17 A Yes.

18 Q Would you look at page 25, please.

19 A Okay.

20 Q At the bottom of the page Mr. Walters
21 presents a table in the middle column of which
22 identifies the MID project. Is that the same
23 project as the Modesto line on your exhibit?

24 A I don't know if that's the MID or what
25 was previously referred to as MEG, to be honest

1 with you.

2 Q Mr. Lany, when you first modeled the
3 construction emissions for this project did you
4 include the house at the corner of Acorn and
5 Jurupa?

6 A In the very first model I don't believe
7 we did.

8 Q And in the second round of modeling you
9 did include it, after comments from CURE, but it
10 turned out that you plotted it in the wrong place,
11 and so you had to move the location, is that
12 right?

13 A Yes, we did.

14 Q Well, I was going to ask you if you were
15 aware of California's three strikes law, but that
16 would be -- I won't ask that.

17 MR. JOSEPH: That's all the questions I
18 have.

19 HEARING OFFICER FAY: Mr. Thompson,
20 anything further?

21 MR. THOMPSON: Could we have 30 seconds?

22 HEARING OFFICER FAY: Sure.

23 (Pause.)

24 HEARING OFFICER FAY: Mr. Thompson.

25 MR. THOMPSON: Thank you, Mr. Fay. Just

1 a couple things.

2 REDIRECT EXAMINATION

3 BY MR. THOMPSON:

4 Q Mr. Lany, in your discussion of the
5 nearest sensitive receptor, during our short break
6 here have you had a chance to review CURE's
7 testimony and exhibits?

8 A Yes.

9 Q And do you have any comment to make with
10 regard to the nearest sensitive receptor in
11 referring to portions of the CURE submittal?

12 A Yes. Exhibit D of CURE's submittal
13 includes the --

14 MR. JOSEPH: Mr. Fay, I hate to
15 interrupt, but it's not clear to me why this is --
16 if it's redirect I didn't ask any questions at all
17 that would lead to this, as far as I can tell.

18 HEARING OFFICER FAY: Mr. Thompson, is
19 this within the scope of the cross-examination?

20 MR. THOMPSON: Well, as part of the
21 cross-examination was a cross-examination about
22 the sensitive receptors and the location and
23 definition. And this just goes to one point of
24 that.

25 MR. JOSEPH: Actually I asked no

1 questions at all about sensitive receptors or
2 definition. The only question I asked was whether
3 he plotted the house in the right place.

4 HEARING OFFICER FAY: Well, that goes to
5 the location of sensitive receptors in my mind.

6 MR. JOSEPH: If he's going to testify
7 about the actual location of that house, that's
8 fine. But otherwise, that's all I asked about.

9 MR. THOMPSON: We will retract that
10 question, but expect to see, in briefing, CURE's
11 full 24-hour reference to the closest sensitive
12 receptor.

13 BY MR. THOMPSON:

14 Q Mr. Lany, two other questions. Do you
15 have exhibit 23 in front of you?

16 A Yes, I do.

17 Q Even not knowing the specifics of any of
18 those individual projects, does your conclusion
19 about the bounding of what you calculated for this
20 project remain the same?

21 A Yes, it does.

22 Q And CURE pointed out an error in the
23 location of the nearest sensitive receptor. Would
24 you characterize that error as far as
25 significance?

1 A Well, first of all, I don't know that it
2 is an error. We plotted our receptor location by
3 taking a topo map and a T-square and scaling it
4 off to the scale on the topo map. That's common
5 for most modeling that we would do.

6 And identified, based on that topo map,
7 where the house would be. The house is listed,
8 shown on the topo map. We are off by comparing
9 the location that CURE has suggested, we are seven
10 meters south of the location suggested by CURE.
11 And I think we are 20 meters east of the location
12 suggested by CURE -- or excuse me, 20 meters west.

13 Q Thank you very much.

14 MR. THOMPSON: That completes the
15 redirect rebuttal of Mr. Lany.

16 HEARING OFFICER FAY: All right, any
17 recross, Ms. DeCarlo?

18 MS. DeCARLO: None.

19 HEARING OFFICER FAY: Mr. Joseph?

20 MR. JOSEPH: No, but I can inform the
21 Committee that we'll withdraw our objection to the
22 admissibility of exhibit 23. I think the
23 Committee is capable of determining the weight to
24 which that evidence should be given, and listening
25 and absorbing the testimony that you'll hear about

1 precise emission calculations from this project.

2 So we withdraw our objection.

3 HEARING OFFICER FAY: All right. So
4 exhibit 23 is admitted into evidence.

5 HEARING OFFICER FAY: Do you have any
6 other witnesses on construction impacts, Mr.
7 Thompson?

8 MR. THOMPSON: We do not.

9 HEARING OFFICER FAY: Okay, we'll move
10 to the staff, then.

11 MS. DeCARLO: CURE (sic) calls as its
12 witness Will Walters, our expert in air quality.

13 HEARING OFFICER FAY: Please swear the
14 witness.

15 Whereupon,

16 WILLIAM WALTERS

17 was called as a witness herein, and after first
18 having been duly sworn, was examined and testified
19 as follows:

20 MR. JOSEPH: So as to preempt the
21 otherwise necessary transcript correction I think
22 you meant to say staff calls Mr. Walters, rather
23 than CURE.

24 MS. DeCARLO: Oh, I apologize.

25 HEARING OFFICER FAY: We're off the

1 record now.

2 (Off the record.)

3 HEARING OFFICER FAY: Proceed, Ms.
4 DeCarlo.

5 DIRECT EXAMINATION

6 BY MS. DeCARLO:

7 Q Can you please state your name for the
8 record?

9 A Yes, William Walters.

10 Q What are your duties and
11 responsibilities with regard to reviewing the
12 Riverside Energy Resource Center application for a
13 small power plant exemption?

14 A I conducted the air quality analysis for
15 the project. I also aided in a couple of other
16 issue areas; provided an initial estimate on plume
17 and the fact that the project, due to its low
18 number of hours, would not exceed our initial
19 significant threshold, so we do not need to go and
20 to do any additional analysis in terms of visual
21 analysis.

22 And I also provided some input in
23 regards to aircraft, potential aircraft impacts,
24 from the thermal exhaust as requested by the
25 Commission.

1 Q Would you please briefly state your
2 education and experience as it pertains to the
3 analysis of air quality?

4 A Yes; I have a bachelors in mechanical
5 engineering, and I'm registered in chemical
6 engineering in the State of California.

7 Q Did you prepare or assist in preparing
8 the testimony entitled, air quality, in the final
9 initial study, exhibit 12, and the supplemental
10 air quality testimony, exhibit 15?

11 A Yes, I did.

12 Q Was a statement of your qualifications
13 attached to exhibit 12?

14 A Yes, I believe it was.

15 Q And do the opinions contained in your
16 testimony represent your best professional
17 judgment?

18 A Yes, they do.

19 Q What did you conclude with regard to the
20 project's potential for significant adverse
21 impacts to air quality during construction?

22 A After reviewing the Commission estimates
23 and re-reviewing the estimates, going through the
24 impact analysis, looking at the receptor situation
25 surrounding the site, I determined that there

1 would be no potential for significant impacts at
2 the site.

3 Q Can you please describe staff's
4 significance criteria for construction emissions?

5 A Yeah. We evaluate significance based on
6 five specific criteria, the checklist criteria,
7 which include -- which are listed in the FIS --
8 which include conflict or obstruct implementation
9 of applicable air quality plan; violating the air
10 quality standard substantially to an existing or
11 projected air quality violation resulting in
12 considerable net increase of any criteria
13 pollutant for which the project region is in
14 nonattainment that are applicable federal, state -
15 - well, it goes on. You can read it in the FIS.

16 The fourth one, expose sensitive
17 receptors to substantial pollutant concentrations.
18 Fifth one is create objectionable odors to a
19 substantial number of people.

20 Now, in terms of how we interpret that
21 and deal with that for construction, essentially
22 we look at both the potential for the
23 nonattainment pollutants and their precursors to
24 create substantial increases in the existing
25 violations, both through the modeling and checking

1 to make sure that the calculations are accurate,
2 the modeling analysis is accurate.

3 And also making sure that there is no
4 potential for any new exceedances. Since we know
5 we're in a situation where we have a
6 nonattainment, we mitigate to the extent feasible,
7 for all the pollutants that are criteria
8 nonattainment pollutant standard precursors.

9 And so we take an approach that both
10 looks at emissions; and we take an approach that
11 looks at the site, in and of itself, to provide
12 recommended mitigation measures.

13 And will add to -- general set of
14 mitigation measures that we consider maximum
15 feasible, as necessary. Things like reducing
16 construction schedule, or adding other compliance
17 measures, or compliance assurance measures if we
18 feel it's necessary for particular sites, based on
19 the receptor situation, based on impacts that
20 we're seeing in any particular site.

21 What we don't do is we don't look at
22 every single -- the District's single biggest
23 criteria. We want to have a little playing field
24 for all facility, while the playing field, we're
25 also looking at nonattainment status and

1 attainment status and differentiating, at least in
2 that regard, for the facility. So we don't want
3 to over-mitigate when it's not necessary for an
4 attainment pollutant.

5 But we also don't want to have one power
6 plant that has a completely different set of
7 significance thresholds than another power plant,
8 for construction, because one District uses a
9 different significance criteria than another.

10 Q And has staff previously used this
11 methodology with regard to projects located in the
12 South Coast Air Quality Management District?

13 A Yes, we have. Based on my experience
14 over the last several years, doing two cases,
15 myself, reviewing another case that was done by my
16 coworkers, and discussion with Joe Loyer who
17 worked on three other cases, we have consistently
18 applied this type of methodology.

19 Q And to your knowledge has the South
20 Coast Air Quality Management District ever
21 negatively commented on this approach?

22 A No, we've gotten no comments whatsoever
23 on any of the projects in terms of our use of
24 significance criteria or our findings of
25 significance on any of these projects or

1 construction.

2 Q Do you believe that the applicant's
3 construction emissions estimate is reasonably
4 conservative?

5 A Yes, I do believe the emissions estimate
6 is reasonably conservative. It uses conservative
7 assumptions to maximize the emissions during the
8 worst case created. And it models those
9 throughout the year to determine worst case
10 impact.

11 As noted, some of the construction
12 emission estimates do not include any control
13 efficiency which has over-estimated those
14 particular line items.

15 And the modeling that was done was done
16 under a 12-hour schedule, which is also very
17 conservative, since they don't appear to want to
18 actually operate 12 hours, at least not during
19 that maximum period of time of the initial site
20 preparation.

21 Q What is your opinion of CURE's
22 contention that the construction emissions are
23 under-estimated?

24 A Well, they have several points that
25 they've put forward. One is silt content. I've

1 reviewed the silt content data again and again;
2 taken a look at the other data that has been
3 presented.

4 One of the things I need to impress is
5 the fact that staff is not looking to maximize
6 every single line item on a construction estimate
7 to come up with a super worst case that is no
8 longer realistic, and that with already
9 conservative assumptions in modeling, will result
10 in an impact that is unreasonable.

11 What we're trying to do in assessing
12 both the emissions and the modeling analysis is
13 provide a reasonably conservative worst case, not
14 an unreasonably conservative worst case.

15 So, in looking at the silt content, the
16 average silt content used by the applicant of 13.2
17 appears to be a conservative number, based on the
18 data that I saw and the data that I was able to
19 review this morning that was presented yesterday.

20 One of the other issues that they've
21 identified is the water and control efficiency.
22 And for those particular line items where the
23 applicant has assumed a control efficiency due to
24 water, and we have allowed and have consistently
25 allowed fairly high estimates on that efficiency.

1 And that is due to the fact that we have
2 additional requirements that we place on the
3 applicant over other projects, including having a
4 mitigation measure onsite to continuously observe
5 the site to make sure the mitigation is working.

6 This is not a requirement you see at
7 most sites, and we do allow them to take
8 additional credit for the fact that they are going
9 to be diligent and are required to be diligent,
10 they're going to have to do monthly reports
11 They're going to have to show that the mitigation
12 is working.

13 One of the other contentions was that
14 the handled soil and fill were underestimated. I
15 think the applicant has, to a large degree,
16 corrected that with the additional scraper
17 assumptions that came in late when they were able
18 to get data from their construction firm, I guess,
19 that they selected, that the applicant has
20 selected.

21 And even if it were a little bit under-
22 estimated, as we noted before, they didn't assume
23 any control efficiency, handling what should be a
24 moist soil because they will be watering all the
25 time. And so there should have been some control

1 efficiency that you must take that into account.

2 You can probably at least double the scraper daily
3 loading and come up with the same emission factors
4 that were used, same 50 percent control efficiency
5 due to handling of moist soil.

6 Then the contention that handles that
7 the hours of operation are under-estimated. And I
8 guess, in reality, in terms of the modeling
9 aspect, it over-estimated and provided a 12-hour
10 case for modeling. When, in fact, they're going
11 to be operating an eight-hour day.

12 They presented an eight-hour day for
13 emission purposes, but that was stated and known.
14 You know, staff can do the math and multiple the
15 12 if you want to take a look and see what those
16 numbers were.

17 And the numbers, themselves, in terms of
18 the emissions, were not an issue for staff because
19 we're not using the South Coast emission
20 thresholds for significance criteria. So, the
21 magnitude of emissions aren't as important as the
22 impact in the analysis they were looking at. The
23 magnitude of emissions are important in terms of
24 making sure that the emission estimates are
25 reasonable for the various line items in total.

1 One of the other contentions that they
2 made was the wind speed was under-estimated. This
3 is a pretty interesting contention because the
4 fact that if you increase the wind speed
5 assumption, then you would, I guess, have to turn
6 off the model for those hours where the wind speed
7 is low.

8 Essentially you have conflicting
9 situations. If you're going to assume a 12-mile-
10 an-hour wind speed average, what do you do on all
11 those model days, in fact most of the high impact
12 days that I saw -- results, were low wind speed
13 days. Well, then you're actually modeling apples
14 and oranges in terms of the emissions and that
15 data that's being used.

16 So, while we could agree that there may
17 be some times when the wind speed may be higher,
18 well, we'd have to just model those particular
19 hours when the wind speed was that high. And we
20 would find that we would have an increase in the
21 maximum impacts if those are not maximum impact
22 hours.

23 Q Do you believe that the construction
24 modeling analysis is reasonably conservative?

25 A Yes, I do believe it's reasonable

1 conservative. They have put all the emissions
2 into just a few points and one area source for the
3 wind erosion. This tends to maximize the impacts
4 and not distribute emissions as well as could be
5 done with more points.

6 For example, if you take a look at the
7 South Coast procedures for their LST methodology,
8 they distribute the emissions equally over the
9 entire construction area when they do their
10 analysis.

11 Which means if I were to use that as a
12 significance criteria, I would want the applicant
13 to model it in the same way in which South Coast
14 models for LST. Which includes modeling the
15 sources in a particular distribution; and also
16 includes turning on things like that position,
17 which reduces the impacts due to the fact that
18 some of the particulate will hit the ground before
19 it gets to the receptor.

20 And none of that was done in any of the
21 modeling analyses that were performed, whether it
22 was the applicant's modeling analysis or CURE's
23 modeling analysis. Therefore, the modeling, it
24 doesn't really relate to the LST because the
25 procedures are different.

1 And that can be seen if you take a look
2 at the tables, the LST tables, and see the amount
3 of emissions that are allowed for five-acre sites,
4 bigger than a five-acre site, but if you take a
5 look at the one-acre, the two-acre, the five-acre
6 you can see the emissions allowed go up as the
7 site size goes up. If you recall, the main
8 construction area, maybe eight acres, and the
9 site, itself, is, I guess, about 11 acres. You
10 could see how much emissions would be allowed if
11 you use the LST tables, if they were, if South
12 Coast were to provide a 10-acre or 12-acre table.

13 Q So, when CURE claims that the project
14 exceeds South Coast's LST, is it true that they
15 didn't use the modeling that South Coast would
16 have used for that determination?

17 A They certainly didn't use the modeling
18 that was used to develop the LST tables, which is
19 the procedure that I would require in order to
20 keep the analysis consistent with South Coast's
21 analysis in South Coast's tables.

22 Q What is your opinion of CURE's
23 contentions that the modeling indicates
24 significant impacts?

25 A Well, again, I have to reiterate that

1 staff's not using the South Coast LSTs, and it's
2 not using the regional significance thresholds,
3 the emission thresholds as a significance
4 determination for construction.

5 So, any claim based on that is based on
6 significance criteria that we're not using. And
7 so, to put that aside, just from that particular
8 point of view, there were some other contentions
9 they made on, in fact, the receptor may not have
10 been located in quite the right place, or quite
11 the right height. That would have impacted
12 modeling a very minor, you know, fraction, a
13 microgram/cubic meter. And not change the results
14 of my analysis.

15 It is the remodeling of the higher silt
16 content, again, silt content, but 13.2 is a
17 conservative average. So content, would provide a
18 conservative number for an average daily working
19 of the site.

20 I think it's important that we don't get
21 into a point where staff has to hunt and peck
22 through every site you look at and then try to
23 find out, oh, jeez, you know, there's a certain
24 layer down here. If they get in and start working
25 that particular layer, on this particular day,

1 we're going to have twice the emissions because
2 the silt content's higher. It's not an approach
3 that we are willing to use.

4 We use an average approach. In most
5 sites, in fact, we don't even have any silt data.
6 We use default numbers. The default numbers are
7 well over 13.2. Generally they're in the 8
8 percent range.

9 Again, they indicate that the modeling
10 showed an exceedance of 10.4. Well, I think there
11 are a couple of issues now that has shown that
12 won't happen. Number one, the construction day
13 will not be 12 hours, it will be eight hours.

14 In my analysis I indicate some different
15 schedules of what the impacts would be. If you
16 look at those schedules, first the 7:00 to 7:00, I
17 could point out the page, but I think everybody's
18 probably already seen it. I do not actually do a
19 7:00 to 4:00 because I didn't know that the
20 applicant was going to work that when I was doing
21 this modeling, where I was essentially just
22 turning on and off the hours in the model.

23 If I were to do that modeling, and I did
24 do that modeling at the end of last week, I got it
25 under 6.13 micrograms, which is, well, 10.4 if

1 we're going to assume that, rather than if, in
2 fact, a sensitive receptor.

3 The other sensitive receptors, once we
4 get past that site, we're looking at a quarter of
5 the number, a quarter of the impact. So, the
6 original impact was somewhere around 2.6, I think
7 for the next highest residence. And we go down
8 even lower on the eight-hour schedule.

9 I think the other contention they had is
10 that it would exceed a 1 mcg/cubic meter
11 threshold. Number one, I don't think that will
12 happen at any residential location. Number two,
13 that threshold, again it's a threshold staff is
14 using, it's not a threshold that South Coast is
15 using.

16 If you take a look at the two CEQA
17 guidance documents that South Coast has published,
18 their 1993 CEQA handbook, for their LST document,
19 you will not find any mention of 1 mcg/cubic meter
20 as a significant threshold for construction for
21 any impacts. It does not exist.

22 Also mentioned claims with using the
23 higher emission estimates that the impacts would
24 be higher, something like 18 micrograms on the
25 average, which would also be a little bit higher

1 over one, again, the staff believes, because the
2 construction emission estimated is reasonable for
3 this case. It is consistent with other cases, as
4 shown in the table that I provided in the
5 conclusion section of my additional staff
6 testimony, exhibit 7-15.

7 Q The initial one was exhibit 12.
8 Supplement exhibit 15.

9 A 15, in exhibit 15. Shows the comparison
10 of the other two recent SPPEs. And if you would
11 schedule the 12-hour schedule down to an eight-
12 hour schedule, you'd see that the numbers are very
13 consistent in terms of the emission estimates.

14 Q What sensitive receptors did you analyze
15 impacts to in the vicinity of the site?

16 A Well, we looked at a lot of sensitive
17 receptors, we looked at both the true sensitive
18 receptors, which would be the schools, hospitals,
19 et cetera. None of those were within a half mile
20 of the site or the impacts at those particular
21 locations are all very low.

22 The other sensitive receptors that we
23 looked at were the residences that were
24 surrounding the site. For our analysis we have
25 included the Kennel as a sensitive receptor. And

1 even if we do continue to include that as a
2 sensitive receptor, we would have the same finding
3 of no significant impacts at that particular
4 residence.

5 The other sensitive receptors we found
6 were some residences, one that I think was just
7 inside a half a mile, and another two that were a
8 little bit outside a half a mile. And as before,
9 the maximum impact, the second most impacted
10 residence is about a quarter of that of the impact
11 of the Kennels, the impacts drop very quickly.

12 If you get to any population at all the
13 impacts will be very low in the residential areas
14 that are near the site.

15 Q And you heard the applicant earlier
16 refer to exhibit 21, the letter from the Kennel
17 owners where they agreed to vacate the site for
18 four hours per day during construction. Does the
19 existence of this letter alter your conclusions in
20 any way?

21 A Well, obviously I haven't been able to
22 model a four-hour impact day and find out what
23 that might be. But I would certainly assume it
24 would be lower than the impacts that I've shown in
25 my analysis at this point.

1 So the impacts would be less since the
2 kennel owners will only be there four hours during
3 the construction period.

4 Q Can you please explain how distance and
5 location of the receptors impact the potential for
6 a significant impact to them?

7 A Well, for construction particularly,
8 distances were the most important factors. We
9 generally don't assume, in fact the modeling does
10 not assume buoyant plumes, so essentially the
11 dispersion indicates the highest results at the
12 fenceline, and they drop very quickly.

13 So, if you don't have any receptors near
14 the site you're not going to have any impacted
15 receptors because the impacts drop so fast with
16 distance.

17 Q Will the construction ozone precursor
18 emissions perceptively impact ozone concentrations
19 near the site or regionally?

20 A No. I obviously haven't done any ozone
21 modeling, nor would I do ozone modeling for such a
22 small source. But they would not perceptively or
23 measurably impact the ozone near the source.

24 In my previous work South Coast told us
25 not to model the LAX master plan, which a

1 thousands of tons of increased NOx and VOC,
2 because they didn't think it would impact the
3 results of their current analysis because of the
4 large quantity of emissions that occur in the
5 Basin. And 100 pounds a day certainly would ont
6 perceptively change ozone impacts.

7 Q Can you please describe the mitigation
8 staff has proposed to mitigate the project's
9 potential for significant construction impacts?

10 A Yes, we have provided essentially two
11 different types of methods for controlling
12 emissions; and then we've also provided some
13 conditions for assuring that those controls work.

14 In the proposed condition AQC-3 we
15 provide both a list of fugitive dust mitigation
16 requirements and provide equipment tailpipe
17 emission control requirements that will reduce the
18 PM10, NOx, VOC and CO emissions from the equipment
19 that could otherwise be used at the site.

20 In terms of the compliance assurance we
21 require an air quality construction mitigation
22 manager to be at the site during construction to
23 make sure that all of the measures that we're
24 requiring will, in fact, be enforced.

25 We require monthly reports to be

1 completed to show the measures that are being
2 done, to provide the data on the equipment that's
3 being used, on the fuel that's being used, to show
4 that it complies with the requirements.

5 We also have identified a construction
6 schedule that we think is a reasonable
7 construction schedule to make sure that there will
8 not be significant impacts during the initial
9 grading phase and our limitation is an 11-hour
10 schedule right now. I believe that the applicant
11 is going to take a shorter schedule which would
12 further reduce the potential for impact. And
13 staff doesn't actually think that it's necessary,
14 but we certainly would have no problem modifying
15 that particular condition.

16 Q And do you have any experience with the
17 effectiveness of these recommended mitigation
18 measures?

19 A Yes. I've performed two unannounced
20 inspections this past year during 2004, one at the
21 Vernon site and one at the Magnolia site. I've
22 gone in both sites, found them to be extremely
23 well taken care of. Went through all the records
24 that were provided.

25 Found that our tailpipe emission

1 control, which is something that was actually very
2 easy to accomplish, it was not only feasible, it
3 was something that was not overly burdensome; and
4 was able to be done without requiring a
5 significant level of exceptions, which are allowed
6 in the language.

7 In fact, at the two facilities I believe
8 there was one piece of equipment that was provided
9 for an exception. All of the rest were tier 1A, a
10 great number of the equipment were actually tier
11 2, so they were even lower emission equipment than
12 we analyzed for those projects, or required for
13 those projects.

14 In terms of the fugitive dust mitigation
15 both sites were well watered. There were a couple
16 of housekeeping issues that I found at Magnolia,
17 they were very minor, that I dealt with. To my
18 chagrin I found absolutely nothing at Vernon. I
19 was actually somewhat embarrassed that I couldn't
20 find anything wrong.

21 Q Do you find any merit to CURE's claims
22 that these mitigation measures do not mitigate the
23 identified impacts because they were already taken
24 into consideration in the modeling?

25 A No. In fact, I don't really understand

1 that because we're not actually requiring
2 additional mitigation because, again, staff
3 doesn't believe that the modeled impacts or the
4 emission estimates provide for a significant
5 impact.

6 What the applicant did, and what the
7 applicant did per our recommendation, was include
8 the mitigation in the initial analysis. And it
9 was up to staff to make sure that the mitigation
10 measures that we provide in our recommended
11 condition would essentially allow for mitigation
12 the applicant's assuming in their emission
13 calculations.

14 I suppose we could have asked them to do
15 two analyses, one with uncontrolled and one with
16 controlled. But we didn't really see the need to
17 do that. Better just to go ahead and assume the
18 controls. And then if we were to find some
19 impacts after that point, then we could look at
20 additional mitigation measures beyond the ones
21 that essentially are raised, that staff would be
22 imposing, as we did for the two other recent SPPE
23 projects.

24 And, in fact, I told this particular
25 applicant during prefiling to look at the

1 conditions that we required both on the TID and
2 MID; realize that those conditions would
3 essentially be the conditions that we would likely
4 impose. And to apply reasonable control to their
5 emission estimates based on the assumption that
6 those mitigation measures would be applied to the
7 site.

8 So, the fact is the mitigation measures
9 will be effective; will be effective above and
10 beyond what was modeled. Maybe marginally there
11 are some additional things that the applicant
12 didn't consider; there are some things that the
13 applicant, for example, scraper drop, they didn't
14 even include it in emission control assumption.

15 But, again, we have not found
16 significance with the assumptions that the
17 applicant has provided.

18 Q Are you aware of any significant
19 emissions sources that should have been included
20 in a cumulative impact analysis for construction
21 but were not?

22 A No, I'm not. I viewed the applicant's
23 contention, essentially, from two different
24 sources. One being the fact that this source, in
25 and of itself, could expand. Well, I think we

1 could probably say that if every power plant that
2 is constrained that we're permitting, there's
3 certainly enough room to put more turbines in at
4 MID, there's more room to put additional turbines
5 in at TID, there's more room to put additional
6 turbines in most of the sites that aren't highly
7 constrained.

8 It's probably likely that in the future
9 a facility like El Segundo will change out the
10 other two old boilers and put in some new
11 turbines. They will be analyzed when those
12 projects are proposed.

13 The applicant has proposed a particular
14 project. We are analyzing that particular
15 project. They are not proposing anything beyond
16 that project at this point, and therefore we are
17 not considering that in a cumulative impact.

18 In terms of construction, since they
19 would be done at different times, of course there
20 would be no cumulative impact anyway. In terms of
21 the capital improvement projects and the
22 construction of those projects, taking what was
23 being done in 2004/2005 timeframe, I didn't see
24 anything that looked like a major construction
25 project.

1 Not only that, obviously they're not
2 going to be constructed on the same facility.
3 Construction impacts, as I noted previously, drop
4 significantly with distance. So essentially if
5 you're not overlaying the emissions on top of the
6 existing emissions from a construction, the
7 overlap and potential for significance impact in a
8 cumulative nature is very low.

9 Q Have you recently worked on any project
10 similar to this one?

11 A Yes, I worked on the MID MEGS, Ripon
12 SPPE case.

13 Q Can any comparison be made between that
14 project and this one on construction?

15 A Yeah, very similar comparison between
16 the sites. Design is almost identical; they both
17 are two LM6000 turbines, running simple cycle.
18 Both have ZLD systems. Both have chillers with
19 the requisite cooling tower for the chillers.

20 The sites are approximately the same
21 size. And the construction schedule is also very
22 similar. The construction emissions that were
23 estimated are very similar.

24 The things that are different, the fact
25 that the sites are in two different locations.

1 MID Ripon actually had many more receptors near
2 the site than this particular project. It also
3 showed higher impacts in this particular site at
4 those residential receptors. Two of the ones that
5 were directly north of that proposed project.

6 So the projects are very similar;
7 construction was very similar; the estimates were
8 very similar. The impacts are actually a little
9 higher for MID Ripon. So this project actually
10 had lower impacts and some of the other
11 assumptions, such as a four-hour day of impacts at
12 the worst case residence, if we're going to
13 consider that a sensitive receptor. Or if we go
14 to our second sensitive receptor as our primary
15 sensitive receptor, the impacts are considerably
16 lower at this particular facility.

17 Q And did the Commission find no
18 significant impact in that case?

19 A Yes, they did find no significant impact
20 after applying the recommended condition of
21 exemption.

22 Q Are you aware of any other similar SPPE
23 projects?

24 A Yes. Another project that was done this
25 year is the Kings River, and I can't remember off

1 the top of my head the full name of it, so we'll
2 call it the Kings River SPPE.

3 And that project again essentially
4 identical design with this project. Very similar
5 site size. Emission estimates procedures were
6 very similar; the results were very similar. And,
7 again, the impacts were found to be a little
8 higher at the maximum exposed residence than this
9 particular facility.

10 Q And did the Commission also file a
11 mitigated negative declaration in that case, as
12 well?

13 A Yes, they did.

14 Q To your knowledge did CURE or Dr. Fox
15 object to the Commission's mitigated negative
16 declaration in either of these two proceedings?

17 MR. JOSEPH: Objection, relevance.

18 MS. DeCARLO: It goes to the similarity
19 of those projects and this one regarding the
20 consistency of how items were handled.

21 MR. JOSEPH: CURE was not an active
22 intervenor in either of those projects, so it of
23 course goes without saying --

24 MS. DeCARLO: I do believe CURE was an
25 intervenor in one of those.

1 MR. JOSEPH: I said CURE was not an
2 active intervenor. We were on the list. We did
3 receive copies of things.

4 MS. DeCARLO: You did request to
5 intervene and that request was granted.

6 HEARING OFFICER FAY: Okay, we're going
7 to overrule the objection. Which case was CURE a
8 party?

9 DR. REEDE: CURE was a party in MEGS,
10 sir.

11 HEARING OFFICER FAY: MEGS, okay. Thank
12 you. The objection is overruled; go ahead, answer
13 the question.

14 MR. WALTERS: No we didn't have any
15 active participation or any issues, they didn't
16 bring up any issues in terms of our construction
17 impact analysis or significance findings.

18 BY MS. DeCARLO:

19 Q And does that complete your testimony on
20 construction impacts?

21 A Yes, it does.

22 BY MS. DeCARLO:

23 Q The witness is available for questions
24 or cross-examination.

25 HEARING OFFICER FAY: Okay, before we

1 begin cross-examination we're going to take a
2 short break, five, seven minutes.

3 (Brief recess.)

4 HEARING OFFICER FAY: Mr. Thompson, do
5 you have any cross-examination?

6 MR. THOMPSON: We do not.

7 HEARING OFFICER FAY: Okay.

8 MR. THOMPSON: We'd like to comment that
9 we think the staff has done a terrific job in a
10 relative short amount of time in their analysis.

11 HEARING OFFICER FAY: Mr. Joseph, your
12 witness.

13 MR. JOSEPH: One moment, please.

14 (Pause.)

15 CROSS-EXAMINATION

16 BY MR. JOSEPH:

17 Q Good morning, Mr. Walters.

18 A Good morning.

19 Q Before we get into the details of your
20 testimony I want to ask you about some basic air
21 quality terms so that it's clear that everybody
22 understands the jargon we're going to be throwing
23 around. Not everybody is as steeped in this
24 arcane area of analysis as everybody else.

25 Will you distinguish for me between the

1 concept of mass emissions and ambient air quality
2 standard -- sorry, ambient air quality?

3 It's not a trick question. I really
4 want to get it clear on the record --

5 A No, I just don't under the relevance,
6 they're so basic that I think anybody can
7 understand the difference between mass emissions
8 that are coming from a facility and ambient air
9 quality which is the ambient concentrations that
10 occur in the air.

11 Q Perhaps you're right; perhaps everybody
12 does. But, I just want the record to be clear
13 that it's clear that we're using common
14 terminology.

15 The phrase mass emissions means the
16 amount of a particular pollutant that is emitted.
17 For example, the amount of dust that's kicked up
18 during construction, is that right?

19 A Correct.

20 Q Okay. And the concept of ambient air
21 quality is focused on the concentration of a
22 pollutant in the air, is that right?

23 A Correct.

24 Q In the final initial study table 1, page
25 4-6, would you look at that, please. Do you have

1 that? You provide the federal and the California
2 ambient air quality standards. I take it you're
3 intimately familiar with the concept of an ambient
4 air quality standard?

5 A Yes.

6 Q I'd like to read you one sentence from
7 the California Air Resources Board website and ask
8 you if you agree with that statement. The
9 statement is: An air quality standard defines the
10 maximum amount of pollutant that can be present in
11 outdoor air without harm to the public's health."
12 Is CARB correct?

13 A I think in a very general way they may
14 be correct, that if you exceed certain amounts of
15 pollution you may have some adverse impacts to
16 certain people.

17 But that statement in that broad context
18 that I think you're trying to imply is not true.

19 Q I'm not trying to imply anything. I
20 read you a sentence and I just asked if you agree
21 with it.

22 A As far as you can take it, but the
23 sentence really isn't complete.

24 Q Do you agree that an air quality
25 standard defines the maximum amount of pollutant

1 that can be present in outdoor air without harm to
2 the public health?

3 MS. DeCARLO: Objection, he's already
4 answered that question.

5 MR. JOSEPH: Well, I haven't gotten a
6 clear answer --

7 HEARING OFFICER FAY: I'm not sure that
8 he has. Overruled.

9 MR. WALTERS: Well, I believe that's the
10 way the state has defined the ambient air quality
11 standard. That's not necessarily the federal EPA
12 has defined those. Whether or not they really
13 mean that if you go over that standard that half
14 the population will drop dead, well, no, I don't
15 think that's the case at all.

16 I think, in fact, impacts below can
17 cause problems with some people; and some people
18 could handle concentrations considerably higher
19 without any adverse effect. Basically it's a
20 number that they use as a representative number.

21 BY MR. JOSEPH:

22 Q And you agree that that's what the State
23 of California uses for determining an air quality
24 standard? That's what you just said, is that
25 right?

1 A Apparently that's what they're saying in
2 your sentence.

3 Q So when ambient air has a concentration
4 above the standard that means that air quality is
5 such that it can cause substantial adverse effect
6 on humans?

7 A I don't think that I would necessarily
8 say that it's going to happen to all humans.

9 Q That wasn't actually the question I
10 asked. I didn't ask about all humans.

11 A Well, I think concentrations below,
12 above, at various concentrations. I mean those
13 particular numbers came out of various health
14 studies and are health protective, certainly. Are
15 they more health protective than they necessarily
16 need to be, well, that depends on what you define
17 as self protective, and what level is health
18 protective.

19 So, you're trying to use a very broad
20 context here that I don't think applies to what
21 California's trying to do with the ambient air
22 quality standards.

23 Q Let me try it differently then. Would
24 you agree that the California Air Resources Board
25 has determined that if ambient air has a

1 concentration above the standard that they have
2 set, that means that the air quality is such that
3 it can cause substantial adverse effect on humans?

4 A I am not a member of the California Air
5 Resources Board, so I won't speak for them.

6 Q Do you understand what CARB meant when
7 it set ambient air quality standards?

8 A Yes. Yes, and --

9 Q Did they mean that a violation would --
10 of a standard would cause -- could cause some
11 substantial adverse effect on humans?

12 This was supposed to be an easy
13 question. This wasn't the hard stuff yet.

14 A I don't know where you're going with the
15 question.

16 Q You don't have to know where I'm going,
17 just answer my question, please.

18 A I think any exceedance could cause some
19 negative problems, as clearly the exceedances of
20 pollutants that aren't even listed as criteria
21 pollutants.

22 Q Thank you.

23 A At those levels or at any other.

24 Q What does the term nonattainment mean?

25 A Nonattainment means that there is a

1 certain number of violations that occur through
2 definition for each of the pollutants, which each
3 of them are different, depending on whether it's
4 federal or state, or depending on the pollutant.

5 Sometimes it's a single violation;
6 sometimes it's the fourth highest high. It all
7 depends on the pollutant. And if you have enough
8 exceedances above the standards, then you have --

9 Q What is the 24-hour California ambient
10 air quality standard for PM10?

11 A The 24-hour standard for PM10 is 50
12 mcg/cubic meter.

13 Q Would look, please, at the final initial
14 study table 19 on page 4-36. In the PM10 24-hour
15 line you show a project impact of 70.4. Now, I
16 know that's not the current number, based on the
17 most recent modeling. But what that number means
18 is that the project alone, not including any
19 existing background PM10 that already exceeds the
20 standard, would increase the ambient concentration
21 by 70.4 mcg/cubic meter at the fenceline.

22 Do you agree that that's what that
23 number meant when you published this table?

24 A Right, that a worst case potential
25 impact to be 70.4 at the fenceline.

1 Q Okay. Now, let's turn to the
2 corresponding table 19 in your supplementary
3 testimony, which is on page 4-14. In the
4 equivalent spot for the 24-hour PM10 project
5 impact you now have the number 10.23. And in
6 footnote E you say that the values presented are
7 the maximum concentrations modeled at the nearest
8 residential receptor.

9 And then in footnote F you say the
10 maximum modeled fence-line concentrations are 97.6
11 mcg/cubic meter 24-hour maximum and 4.97 mcg/cubic
12 meter annual average.

13 This means that the project construction
14 will cause an increased concentration of PM10 at
15 the fence-line of 97.6 mcg/cubic meter, is that
16 right?

17 A It means that it could on a worst case
18 basis, if all the stars were to align properly.

19 Q Well, it means that that's what the
20 applicant's modeling, which you have accepted,
21 projects, is that right?

22 A Yes. Which is in line with almost every
23 other project I've analyzed.

24 Q Now, on this same table you have four
25 numbers which are shown in bold. In the

1 background column you have those shown in bold
2 because those are the concentrations which exceed
3 the PM10 ambient air quality standard, is that
4 right?

5 A The ones that are identified in bold are
6 the ones that essentially exceed the percent of
7 standard over 100 percent --

8 Q I'm sorry, exceed?

9 A Exceed 100 percent of the percent of
10 standard. That's essentially the rule of thumb
11 for these tables. If it's over 100 I bold it out
12 those -- numbers.

13 Q You mean over 100 percent of the
14 standard?

15 A Right.

16 Q And in the far right column you give
17 that percentage. And for PM10 the percentages are
18 over 300 percent. Meaning that the background
19 concentration is more than 300 percent over the
20 standard, is that what that means?

21 A It means that with, yeah, the total with
22 the project impact and background are over 300
23 percent.

24 Q Now, I'd like to ask you a hypothetical
25 question. Suppose the background air in the

1 project area had no PM10 at all, zero, it was
2 absolutely pristine.

3 And construction of the project, this
4 hypothetical project, causes 24-hour PM10 to be 51
5 mcg/cubic meter offsite. So we have a situation
6 where there's no violation of the ambient air
7 quality standard, and now as a result of the
8 project there is a violation of the standard.

9 Would you say that's a significant
10 impact?

11 A We generally don't look at fenceline
12 impacts for PM10 for construction due to the fact
13 the modeling is such that the impact's not real.
14 We present them because the data is there. But
15 when you get too close to the source, particularly
16 the source, the modeling results are not
17 representative.

18 Q Now, --

19 A But anyways there's no receptor there,
20 so we wouldn't find significance without a
21 receptor.

22 Q Now, --

23 A As we haven't for 20-odd cases we've
24 done over the last couple years that have exceeded
25 over 50 at the fenceline.

1 Q So, I read your testimony on how the
2 Commission should determine if these emissions are
3 significant for purposes of CEQA. And you
4 referred in your earlier testimony to the South
5 Coast standards that say if you exceed a certain
6 number of pounds per day it's significant.

7 Now, is it right that you don't think
8 the Energy Commission should use these South Coast
9 mass emission standards to determine if an impact
10 is significant?

11 A Actually I think the better way to put
12 it, we prefer to have consistent standard that we
13 apply to all the projects that we evaluate. And
14 if we were to use every different standard that
15 every different district has, we would not have a
16 consistent --

17 Q And specifically with respect to the
18 South Coast standards, you do not think it's
19 proper to use those in this case?

20 A We have not used them in the past and,
21 no, I don't believe we should start with this
22 particular case.

23 Q And you also don't think that the Energy
24 Commission should use the South Coast standards
25 for increases in ambient concentration at the

1 nearest residence, do you?

2 A No, I don't believe we should use the
3 LST standards, either. Because we haven't used
4 them in the past; we don't use them in the Central
5 Valley; we don't use them anywhere else --

6 Q On page --

7 A -- basis.

8 Q Sorry, you finished? On page 4-16, you
9 list five significance criteria --

10 MS. DeCARLO: I'm sorry, of what
11 testimony is that?

12 MR. JOSEPH: Sorry, we're in the same
13 document, in the supplemental testimony.

14 BY MR. JOSEPH:

15 Q Number 2 says violate any ambient --
16 sorry, violate any air quality standard or
17 contribute substantially to an existing or
18 projected air quality violation.

19 Now, the project would violate the PM10
20 ambient air quality standard at the fenceline, and
21 it would contribute substantially to an existing
22 violation of the PM10 ambient air quality
23 standard.

24 So you don't actually use number 2.
25 Instead what you say on the top of page 4-19,

1 starting in the sixth line down, you say, simply
2 put, staff's approach to provide for insignificant
3 construction impacts is to require all feasible
4 mitigation for the nonattainment and precursor
5 pollutants during construction.

6 So, as far as you're concerned it
7 doesn't matter what the remaining impact on
8 ambient air quality is so long it's all feasible
9 mitigation is required, is that right?

10 A Well, you didn't actually list all of
11 that. That we also require additional mitigation
12 measures such as construction scale limitations,
13 if they're warranted, considering specific
14 conditions, at the site being evaluated.

15 Q But if all feasible construction
16 mitigation measures are imposed, you conclude that
17 the impact is not significant without regard to
18 what the remaining ambient air quality
19 concentration is, is that right?

20 A No. I believe I just answered that.
21 That we take a look at the specific conditions of
22 the site, and then we propose additional
23 mitigation if we think it's warranted, based on
24 the impacts.

25 And in this particular site we added a

1 construction schedule. In other sites we've added
2 construction schedule. In some we've added things
3 like ambient monitoring for compliance assurance.
4 It depends on the site.

5 So, no, we don't just do that. We take
6 a look at it from the qualitative point of putting
7 in feasible mitigation. Then we take a look at it
8 from a quantitative point and add additional
9 mitigation if we think it's necessary.

10 Q And after you've added all the
11 mitigation that you consider feasible, regardless
12 of the remaining ambient air quality impact, you
13 conclude that the impact is not significant, is
14 that right?

15 A No. I believe I just answered that
16 question.

17 Q Well, let's start with a yes or a no,
18 and then see if --

19 A We made the --

20 Q -- you can explain.

21 A -- we made the conclusion based on the
22 impact results that we're taking a look at. We do
23 put in the mitigation as necessary for the
24 different sites. Some sites would not require as
25 much because they don't have any receptors nearby.

1 Something like Pastoria, for example, I
2 think had nearest receptor five miles away. TID
3 the nearest receptor was 600 feet away in the
4 primary wind direction. So we consider all of
5 that in our assessment, and then we add any
6 additional mitigation we think is necessary.

7 Q Let's talk about this case specifically
8 then.

9 A But do we have a single number that we
10 look at as being a significance criteria, no, we
11 don't. We don't do it that way.

12 Q Suppose the impact, after you've imposed
13 all mitigation that you determine is appropriate
14 and feasible, suppose the impact downwind of the
15 site was 97.6 mcg/cubic meter. Actually, let's do
16 better, let's suppose it was 976. Actually, let's
17 do better than that, let's suppose it's 9760
18 mcg/cubic meter. But you've imposed all the
19 mitigation that you think is appropriate.

20 Would you consider that to be a
21 significant impact?

22 A You're talking at a receptor location?

23 Q I'm talking outside the fenceline.

24 A Outside the fenceline may or may not be
25 relevant depending on what is outside the

1 fenceline. At a receptor location, if I were to
2 see numbers that were that high, then we would
3 have an issue of significance.

4 Q By an issue of significance that means
5 you conclude that the impact is significant?

6 A With numbers that high anybody would
7 conclude that they would be significant.

8 Q Okay, so there is a certain number that
9 would trigger a conclusion that it's significant
10 despite imposing all feasible mitigation?

11 A There is an area of consideration the
12 staff used, but it's more than just a single
13 number. It would include how often significant
14 impacts would occur; the likelihood of the
15 significant impacts occurring.

16 In this case, for example, the applicant
17 has modeled the worst case impacts over the entire
18 year, although the worst case impacts are only
19 going to happen in a three-week period. So would
20 you actually have your top impact during a three-
21 week period when you've modeled 365 days.

22 There's a lot of factors that staff
23 takes a look at when we're identifying whether we
24 think a particular impact is significant. And
25 it's not just modeling results, because the model

1 results have to be taken in context.

2 Q So at some point the number is big
3 enough, but the number that you use for
4 determining significance is not the number
5 established by the expert state agency, the
6 California Air Resources Board, for determining
7 human health impacts?

8 A The numbers you're talking about that
9 they've put out are not CEQA significance
10 threshold, so if you could give me a CEQA
11 significance threshold they provide in mcg/cubic
12 meter, then we could talk.

13 Q Would you look at your air quality
14 condition AQ-C-3, which is on page 4-26, starts on
15 page 4-26 of the supplemental testimony. Do you
16 have that?

17 In that condition you list a substantial
18 number of requirements to mitigate construction
19 emissions. Can you tell me which one of those on
20 the list is the least effective?

21 A I haven't quantified each and every one
22 of them.

23 Q Can you pick out one that's not very
24 effective?

25 A I -- talking about a particular

1 purpose --

2 Q Take a look, these are your measures, I
3 assume you have some sense of whether they're
4 useful or not. Tell me which is the least useful.

5 A Well, this particular case I'm trying to
6 remember the exact configuration of the site, the
7 sandbags being the least useful.

8 Q Okay.

9 A But they may be useful depending on what
10 they're doing on the south side of the site.

11 Q Can you help me, which item -- where are
12 the sandbags located?

13 A They would be, let's see, H -- yes, it's
14 H.

15 Q Is H -- H is the one you're referring
16 to? Suppose we deleted H from the list. and
17 having deleted it, at this point you would now not
18 be requiring all feasible mitigation. And even
19 though the ambient air quality of deleting that is
20 small, would you say it's not significant because
21 you're not requiring all feasible mitigation?

22 A We require the mitigation that we
23 consider to be feasible. We're not going to be
24 deleting particular items that we -- for any
25 particular reason unless there is a reason for

1 them to be deleted.

2 In one case, the Salton Sea, at their
3 site they didn't need sandbags because the
4 configuration of the site was all running
5 downhill.

6 But, --

7 Q I understand it's not your intent to
8 delete them, but I'm asking you to assume for a
9 moment that it was deleted from the list. And
10 that the ambient air quality impacts were
11 therefore ever so slightly larger, would you say
12 that the impact is now significant because you
13 didn't require all feasible mitigation?

14 A We require all feasible mitigation. The
15 question doesn't make any sense.

16 Q Well, I don't think the question is
17 unintelligible. I'd like to have an answer.

18 A We would do it, so it's not --

19 Q I'm asking you to assume
20 hypothetically --

21 A Hypothetically we're not going to do it.

22 MR. JOSEPH: Mr. Fay, I think it's a
23 fair question; I'd like to get an answer.

24 HEARING OFFICER FAY: Well, I think we
25 have an answer. That this is not something that

1 staff would do.

2 MR. JOSEPH: That wasn't the question I
3 asked. I didn't ask whether staff would do it; I
4 said if it were not on the list. And the impacts
5 were ever so slightly larger would that make the
6 impact significant because all feasible mitigation
7 measures were not required.

8 HEARING OFFICER FAY: All right, I'm not
9 sure --

10 MR. WALTERS: If it were not on the list
11 we would add it to the list, so that we'd have all
12 feasible mitigation measures.

13 MR. JOSEPH: Well, let me try it a
14 different way.

15 BY MR. JOSEPH:

16 Q Suppose you forgot to include it, does
17 that make the impact significant because all
18 feasible mitigation wasn't required?

19 A If we forgot to include it then you
20 could address that and say, hey, you forgot to
21 include this particular measure. Then we could
22 have added it.

23 Q Suppose when the decision came out from
24 the Commission it was not included on the list
25 because someone forgot to include it, does that

1 make the impact significant because you didn't
2 require all feasible mitigation?

3 A Not necessarily.

4 Q Suppose six months from now you're
5 sitting at your desk and you think of another
6 mitigation measure that's feasible, does that mean
7 that the PM10 impacts really were significant all
8 along because you didn't require all feasible
9 mitigation?

10 MS. DeCARLO: I'm going to have to
11 object to this line of questioning. The witness
12 has already testified that they've identified all
13 feasible mitigation, that they would not exclude
14 any particular mitigation measures in the
15 condition of exemption.

16 MR. JOSEPH: Mr. Fay, staff sets out its
17 key test for significance by saying that staff's
18 approach to provide for insignificant construction
19 impacts is to require all feasible mitigation for
20 the nonattainment precursor pollutants during
21 construction.

22 I'm entitled, and I think the Committee
23 will benefit by testing that assertion.

24 MR. WALTERS: That's not all of it.
25 You're not including the rest --

1 HEARING OFFICER FAY: Okay, --

2 MR. WALTERS: -- of the significance
3 criteria.

4 HEARING OFFICER FAY: -- I think we're
5 going to move on. We get the point.

6 BY MR. JOSEPH:

7 Q Mr. Walters, on page 4-12 of your
8 supplemental testimony you say that because the
9 CEC is the lead agency it has the authority to
10 determine appropriate significance criteria.

11 Would you agree that the Commission's
12 discretion is limited by what CEQA, the law
13 itself, says?

14 A I'm not a lawyer; I'm not qualified to
15 answer that question.

16 Q Well, you've given a raft of testimony
17 about what is or is not significance. Would you
18 say that the Commission's determination is bounded
19 -- would you agree that the Commission's
20 determination is bounded by what the law says? Or
21 are you testifying without regard to what the law
22 is?

23 A I'm testifying based on my expertise and
24 based on CEC Staff's interpretation for the last
25 29 cases on how we deal with construction impacts.

1 Q Before you prepared your testimony on
2 the issue of significance did you happen to
3 actually look at what the statute said?

4 A I've looked at the statutes at various
5 times. Did I look at it right before I produced
6 this one? Probably not. This is an SPPE, so a
7 lot of the statutes don't apply.

8 Q But you didn't look at what CEQA
9 actually says about what a significant impact is,
10 did you?

11 A Right before I did this analysis? I
12 don't know.

13 MR. JOSEPH: May I have a moment, Mr.
14 Fay?

15 HEARING OFFICER FAY: Certainly.

16 MR. JOSEPH: That's all the questions we
17 have on the area of construction.

18 HEARING OFFICER FAY: Okay, thank you.
19 Ms. DeCarlo, do you have any redirect?

20 MS. DeCARLO: If I could have a couple
21 minutes to confer with my witness.

22 HEARING OFFICER FAY: Okay.
23 Commissioner Geesman has a question of the
24 witness.

25 COMMISSIONER GEESMAN: What is the

1 authority of the onsite mitigation manager?

2 MR. WALTERS: Their authority is to make
3 sure that the mitigation measures are properly
4 administered. And if not, that mitigation manager
5 is supposed to contact the CPM, construction
6 project manager, at the CEC in order to properly
7 deal with the fact that the contractors will not
8 apply the proper mitigation.

9 COMMISSIONER GEESMAN: And what is the
10 authority of the CPM in a situation where the CPM
11 receives a report from the mitigation manager that
12 the mitigation is not being properly carried out?

13 MR. WALTERS: I'd have to speculate
14 because I --

15 COMMISSIONER GEESMAN: Okay. Thank you.

16 HEARING OFFICER FAY: Mr. Walters, in
17 your experience with the Energy Commission have
18 you ever worked on an application for
19 certification?

20 MR. WALTERS: Yes, I've worked on many
21 applications for certification.

22 HEARING OFFICER FAY: Okay. In your
23 opinion, can you compare the level of analysis
24 that you've done in this case, which is an SPPE,
25 to the level of analysis you would have done if

1 this was an AFC?

2 MR. WALTERS: In terms of emission
3 analysis, in terms of modeling impact analysis, in
4 terms of significance and significance
5 determination, for those aspects the analysis is
6 essentially identical to what I've done in an AFC.
7 And actually probably even moreso because of the
8 active intervenor that we have on this particular
9 case.

10 The one area that we don't deal with,
11 with the SPPE, is the LORS, so we do not have a
12 DOC to comment on. And I'm not applying the South
13 Coast requirements into our analysis. And that's
14 really the only difference and that would only
15 apply to operations anyways.

16 HEARING OFFICER FAY: But does that mean
17 that whole subject areas on air quality would not
18 be addressed in the Energy Commission's analysis
19 because there's no DOC performed?

20 MR. WALTERS: Compliance with LORS is
21 really, I think, the only section that is not in
22 an SPPE. But, again, it's compliance with the
23 essentially the permitting LORS that the South
24 Coast is doing separately.

25 HEARING OFFICER FAY: And so by

1 separately you mean the applicant will still have
2 to go to South Coast to get a permit for this
3 project and comply with South Coast LORS?

4 MR. WALTERS: Yes, and that permit will
5 be noticed and public comment can be taken on that
6 permit.

7 HEARING OFFICER FAY: Okay. Excepting
8 conditions of certification or conditions of
9 exemption that might specifically address the
10 literal language of a DOC, are there any
11 conditions of certification that do not appear in
12 your recommended list that you would have put in
13 if this was an AFC-level analysis?

14 MR. WALTERS: That's kind of a
15 complicated question because certain things we put
16 in based on the size. and this project's size is
17 such that we would not put them in.

18 For example, the cooling tower. When we
19 have very large cooling towers and when the local
20 District does not permit the cooling tower, we put
21 in some conditions to make sure that the emissions
22 that we have calculated, you know, will occur. So
23 they will have to do things like do a TDS level
24 quarterly to determine the TDS level or emitting
25 the recirculating water to make sure that it's not

1 exceeding what we've analyzed.

2 In this case the cooling tower is so
3 small; in similar AFC cases we have not, when the
4 cooling tower is, you know, so small and
5 (inaudible) use like this.

6 But for a case like oh, let's say in
7 East Altamont size case, or San Joaquin Valley
8 Energy Center size case, if the agency did not
9 have conditions we would add them.

10 HEARING OFFICER FAY: Okay, but if, for
11 whatever reason, this applicant had filed an AFC
12 for the same project would their, but for
13 reference to a DOC, would there be additional
14 conditions that you would have imposed had you
15 conducted an AFC level --

16 MR. WALTERS: Not on this project.

17 HEARING OFFICER FAY: Okay. And in your
18 opinion has the staff and/or the applicant, to
19 your knowledge, responded to any recommendations
20 from intervenor CURE?

21 MR. WALTERS: Yes. They've provided
22 additional emission estimates for worst case for
23 the operating emissions, both from the filter
24 cake, they've remodeled based on that. And
25 they've redone the construction emissions and

1 remodeled those using a lot of the recommendations
2 that were noted by CURE.

3 HEARING OFFICER FAY: Thank you. Ms.
4 DeCarlo, redirect.

5 MS. DeCARLO: Could I have a couple of
6 minutes to confer with my witness regarding
7 whether or not we have any redirect?

8 HEARING OFFICER FAY: Sure, we're off
9 the record.

10 (Off the record.)

11 HEARING OFFICER FAY: On page 4-16 of
12 your supplemental testimony you go over a list of
13 five items that are criteria listed in the final
14 staff assessment, or the FIS.

15 How long has the Commission used those
16 criteria to your knowledge?

17 MR. WALTERS: They've used them on every
18 SPPE I've worked on. And I worked on the initial
19 MID Woodland case, which would have been what,
20 2000, 2001. So I guess the question is how long
21 has the checklist been around.

22 HEARING OFFICER FAY: Okay, so to your
23 knowledge it goes back to that period of time?

24 MR. WALTERS: At least.

25 HEARING OFFICER FAY: And is this only

1 applied to SPPEs, or is this applied to all cases?

2 MR. WALTERS: It's applied to all cases;
3 it's just a little bit different with an SPPE,
4 since we are trying to have a very definitive
5 finding.

6 HEARING OFFICER FAY: I don't quite
7 understand your --

8 MR. WALTERS: Well, there's a difference
9 between I guess, you know, definitely not having a
10 significant impact and supposing you're not having
11 a significant impact is more of what is the
12 situation for an AFC.

13 HEARING OFFICER FAY: Okay. So can you
14 estimate how many cases you're familiar with have
15 had these criteria applied in the analysis?

16 MR. WALTERS: Well, since I've been
17 working with the CEC we've worked probably between
18 two and three dozen cases. There were 25 in 2001
19 alone, I think.

20 HEARING OFFICER FAY: Okay. And moving
21 to page 4-25 of that supplement, the chart. You
22 compared this project with the MEGS and the Kings
23 River project. Is it accurate to read that bottom
24 line as showing that the maximum daily PM10 is
25 much higher on this project than the other two?

1 MR. WALTERS: Well, that's based on what
2 was modeled, so that's based on a 12-hour day. So
3 you'd have to reduce it down to the same number of
4 hours that's shown in the schedule above. So
5 you'll see that essentially they're very
6 equivalent if you knock the 12-hour day down to an
7 eight-hour day that 62 will drop by a third. And
8 if you make it a nine-hour day it'll go up a
9 little bit more. So the maximum day PM10 numbers
10 are very similar, if not even estimated to be a
11 little bit higher for this particular project than
12 those two.

13 HEARING OFFICER FAY: So if you made
14 that adjustment to eight hours, you say the PM10
15 daily emission would be similar to the other two,
16 is that correct?

17 MR. WALTERS: Yeah, if you want I can do
18 the math. I've got a calculator in front of me.

19 HEARING OFFICER FAY: Well, if we don't
20 have that number in the record, I'd like to have
21 it.

22 MR. WALTERS: Based on an eight-hour day
23 that would be 41.6, and that probably is in the
24 construction emission numbers that are either in
25 the FIS or in here. But I'd have to add them up

1 separately for the onsite and the offsite. But
2 it's 41.6 for eight hours. And 46.8 for a nine-
3 hour day.

4 HEARING OFFICER FAY: Okay, thank you.
5 Okay, Ms. DeCarlo, redirect?

6 MS. DeCARLO: Yes, one question.

7 REDIRECT EXAMINATION

8 BY MS. DeCARLO:

9 Q Mr. Walters, in your expert opinion does
10 any exceedance of air quality standards
11 necessarily result in significant adverse impacts?

12 A No. I wouldn't say they would. I think
13 one of the things that I probably should have
14 indicated during the earlier questioning of CURE
15 is the fact the ambient air quality standards were
16 developed with a margin of safety; in many cases a
17 very large margin of safety.

18 So that the fact there's an exceedance
19 doesn't necessarily mean that there's an adverse
20 impact.

21 MR. JOSEPH: I'm sorry, I couldn't hear
22 the last part of your sentence. Could you just
23 repeat it?

24 MR. WALTERS: An exceedance wouldn't
25 necessarily mean there's an adverse impact.

1 HEARING OFFICER FAY: Is that all?

2 MS. DeCARLO: Yes, that's all.

3 HEARING OFFICER FAY: Okay. Recross,
4 Mr. Thompson?

5 MR. THOMPSON: I just have one question,
6 and bear with me here.

7 CROSS-EXAMINATION

8 BY MR. THOMPSON:

9 Q CURE was asking you about a table, and I
10 think it was on 4-21, but 4-20 also shows in bold
11 there are figures that show those pollutants in
12 the standards -- those pollutants that already
13 exceed standards, is that correct?

14 A Correct.

15 Q So then if you look at 4-16, which are
16 the five criteria, and viewing -- 4-16 is where
17 you have the five parts of -- the five criteria
18 for the project, would the project conflict -- do
19 you have that?

20 A Yes.

21 Q Okay, so if I look at number 2, if
22 there's already a violation am I correct that this
23 project would not violate any air quality
24 standard?

25 A Well, I guess you could say it wouldn't

1 cause a violation of any air quality standard. Of
2 course, violations are also defined at the
3 particular locations where the ambient monitoring
4 is done. So if you're going to model to where
5 those locations are, you essentially have almost
6 no impact.

7 Q And then if we go to the second part
8 which appears to me to deal with the situation
9 where you may already be in violation, and it says
10 to contribute substantially to an existing or
11 projected air quality violation.

12 Would you -- is it your testimony that
13 this project would or would not contribute
14 substantially to an existing or projected air
15 quality impact?

16 A It's my testimony it would not
17 contribute substantially.

18 MR. THOMPSON: Thank you very much;
19 that's all I have.

20 HEARING OFFICER FAY: Okay, Mr. Joseph.

21 RECROSS-EXAMINATION

22 BY MR. JOSEPH:

23 Q Mr. Walters, I take it in the last
24 answer you gave where you said the project would
25 not contribute substantially to an existing air

1 quality violation, you're not using a quantitative
2 measure in making that statement, are you?

3 A I think we are using a quantitative
4 measure, at least in terms of where there are
5 receptors.

6 Q What's the number?

7 A Well, the number is looking at number
8 where the receptors are getting hit and
9 identifying that as not being substantial in the
10 context of the likelihood of it occurring; in the
11 context of the conservativeness of the analysis.

12 Q So the key for you is a substantial
13 contribution to a violation of the standard where
14 there is a receptor?

15 A That's certainly one of the key criteria
16 that we look at. Again, we aren't going to take a
17 look at a fenceline number and make an assumption.
18 You couldn't construct any mini-mall and not
19 consider it significant under those conditions.

20 Q Does that mean you couldn't construct a
21 mini-mall?

22 A No, it just means that you have to
23 consider it significant.

24 Q And if you found that this project met
25 your criteria number two, would that mean the

1 project couldn't be constructed?

2 A Well, obviously if I found significant
3 impacts then it would just mean there would be
4 significant impacts that would require other
5 actions.

6 Q Can you point me to anything in the
7 California Air Resources Board regulations which
8 says that ambient air quality standards apply only
9 where there are receptors?

10 A No. I also can't find anything that
11 says that I should identify CEQA based on
12 fenceline.

13 MR. JOSEPH: Thank you, that's all the
14 questions I have.

15 HEARING OFFICER FAY: Okay. Anything
16 further, Ms. DeCarlo?

17 MS. DeCARLO: No.

18 HEARING OFFICER FAY: All right. Just a
19 moment.

20 (Pause.)

21 HEARING OFFICER FAY: Okay, we thank
22 you, Mr. Walters, for your testimony; you're
23 excused.

24 And now we'll move to CURE's case on
25 construction air quality impacts.

1 MR. JOSEPH: If we could just have a
2 moment to get organized here.

3 HEARING OFFICER FAY: Sure.

4 MR. THOMPSON: Mr. Fay, I believe that
5 lunch is set up, so any time you and the Committee
6 would want to break.

7 HEARING OFFICER FAY: Thank you. I
8 think we'll get started --

9 MR. JOSEPH: So you're pitting our
10 witnesses against lunch?

11 (Laughter.)

12 HEARING OFFICER FAY: We won't hold that
13 against CURE.

14 (Pause.)

15 HEARING OFFICER FAY: Mr. Joseph, will
16 you be presenting your witnesses as a panel?

17 MR. JOSEPH: Yes.

18 HEARING OFFICER FAY: Okay, the court
19 reporter has asked me to insure that your
20 witnesses identify themselves each time they speak
21 because it may not be apparent on the tape which
22 witness is speaking.

23 MR. JOSEPH: What I expect to do is that
24 I will identify the witness I'm asking questions
25 of.

1 HEARING OFFICER FAY: Okay, that's fine,
2 as long as we keep that in mind.

3 MR. JOSEPH: And if at some point it
4 becomes unclear, if the reporter waves, we'll
5 clarify it.

6 Thank you, Mr. Fay. CURE calls its air
7 quality panel which consists of Dr. Phyllis Fox,
8 Camille Sears and sitting immediately to my left,
9 Dr. Petra Pless.

10 HEARING OFFICER FAY: All right, will
11 the court reporter please swear all three
12 witnesses.

13 Whereupon,

14 PHYLLIS FOX, CAMILLE SEARS and PETRA PLESS
15 were called as witnesses herein, and after first
16 having been duly sworn, were examined and
17 testified as follows:

18 HEARING OFFICER FAY: Proceed.

19 MR. JOSEPH: Mr. Fay, the way we're
20 going to organize this testimony is I will first
21 go through the qualifications for each of the
22 three witnesses. And then following that, we will
23 go to the testimony in the order of the
24 significant impacts listed on pages 1 and 2 of the
25 executive summary, so that the record is clear

1 exactly what we're talking about at any one time.
2 Rather than bouncing around from impact to impact.

3 HEARING OFFICER FAY: In the interests
4 of time we do have, and have read, the r, sum, s of
5 the witnesses. And you may save us a little time
6 by moving along through that quickly.

7 MR. JOSEPH: I'm, of course, at your
8 direction. The applicant and staff having said
9 right at the beginning when you identified the
10 legal standard that they're going to focus on
11 claiming that our testimony is argument,
12 speculation or unsubstantiated opinion and
13 narrative, I think it's important to clearly
14 establish for the record precisely the
15 qualifications of these witnesses to give exactly
16 the testimony they're giving.

17 HEARING OFFICER FAY: Mr. Thompson, will
18 you stipulate to the qualifications of these
19 witnesses to testify on these matters?

20 MR. THOMPSON: Either that or we can go
21 to lunch while they go through this.

22 MR. JOSEPH: We won't drag this on
23 forever. I just want to touch on a few points.

24 HEARING OFFICER FAY: Okay. Is there
25 any question about these people being qualified as

1 experts in the subject?

2 MS. DeCARLO: None from staff.

3 HEARING OFFICER FAY: None from staff.

4 None from applicant.

5 MR. THOMPSON: None.

6 HEARING OFFICER FAY: Okay, --

7 MR. JOSEPH: So I think we'll try to
8 limit it to the points that are important for the
9 testimony that follows.

10 HEARING OFFICER FAY: If we read Dr.
11 Fox's r, sum, we'll be here till dinner, so.

12 MR. JOSEPH: She claimed if I let her
13 read it we'd be here till tomorrow.

14 DIRECT EXAMINATION

15 BY MR. JOSEPH:

16 Q First I'd like to start with you, Ms.
17 Sears. Could you just briefly summarize the
18 highlights of your experience, specifically first
19 of all with respect to air quality modeling?

20 MS. SEARS: All right, I started doing
21 air dispersion modeling as a grad student at UC
22 Davis. And I received an MS in atmospheric
23 science at UC Davis.

24 Afterwards I started doing air quality
25 modeling with a consulting firm, Gates & Moore, in

1 Santa Barbara. I worked with the Santa Barbara
2 Air Pollution Control District for about eight
3 years. I worked with URS Consultants for about a
4 year and a half. And during that time period I
5 was also a staff consultant to CEC on AFCs.

6 And since 1992 I've been a self-employed
7 air quality consultant, mainly doing expert
8 witness testimony in court on -- in federal court
9 mainly. So in essence for the last 23 years I've
10 been doing nothing but air dispersion modeling.

11 MR. JOSEPH: Approximately how many
12 modeling analyses have you done?

13 MS. SEARS: I've lost track, but it's
14 well over 1000.

15 MR. JOSEPH: Did you have any role in
16 the development of ACE 2588 model?

17 MS. SEARS: Yes. The ACE 2588 is the
18 assessment chemical exposure for AB-2588 program.
19 I designed that program when I was with the Santa
20 Barbara County Air Pollution Control District.
21 And along with Contran Applied Modeling, I
22 designed and developed the rest of the modeling.

23 And since 1992 I've been providing
24 technical support for the California Air Pollution
25 Control Officers Association to air agencies and

1 consultants and industrial sources on air
2 dispersion modeling, and the use of ACE 2588.

3 MR. JOSEPH: And have you been
4 consultant to various government agencies?

5 MS. SEARS: Yes. For the last 12 years
6 I've been working with the Santa Barbara County
7 APCD, the South Coast AQMD for a short period of
8 time, the Los Angeles County District Attorney's
9 Office. I've been an expert witness for about the
10 last 12 years with the State Attorney General's
11 Office. and then also with the Office of
12 Environmental Health Hazard Assessment. I've been
13 helping them with air dispersion modeling.

14 MR. JOSEPH: Thank you. Next, Dr.
15 Pless. First, can you tell us what degrees you
16 hold?

17 DR. PLESS: I obtained a masters degree
18 in biology from the Technical University of Munich
19 in Germany from which I graduated with honors. I
20 hold a doctorate degree in environmental science
21 and engineering from the University of California
22 Los Angeles.

23 MR. JOSEPH: Cut right to the bottom
24 line here. Have you performed CEQA air quality
25 analyses before?

1 DR. PLESS: I have reviewed and prepared
2 technical comments on numerous environmental
3 review documents such as environmental impact
4 reports, initial studies, applications for
5 certifications, in the areas of air quality,
6 biology, water quality and public health.

7 And I have reviewed more than 30 air
8 quality analyses, both construction and operation
9 of projects, and prepared technical comments under
10 CEQA.

11 MR. JOSEPH: Thank you. Now, Dr. Fox.
12 Well, first of all would you just briefly tell us
13 what degrees you hold?

14 DR. FOX: I have a bachelor of science
15 degree in physics with high honors from the
16 University of Florida. I have a masters of
17 science and a PhD in environmental engineering
18 from the University of California at Berkeley.

19 MR. JOSEPH: And can you tell us what
20 other certificates or registrations you hold?

21 DR. FOX: Yes. I am a registered
22 professional chemical engineer in the State of
23 California. I am a registered professional
24 environmental engineer in the State of Arizona.
25 And I'm a registered professional engineer in

1 Florida, Georgia and Washington.

2 I'm also a Diplomat of the American
3 Academy of Environmental Engineers, certified in
4 the air pollution control. I'm a qualified
5 environmental professional certified in air
6 pollution control by the Institution of
7 Environmental Professionals.

8 And I'm also a registered environmental
9 assessor in California, both class I and class II.

10 MR. JOSEPH: And can you give us a very
11 brief sampling of some of the clients that you
12 have worked for?

13 DR. FOX: The majority of my career has
14 been working for industry. Some of my largest
15 clients over the years have been Unocal, Union Oil
16 Company; Aguim, which is a very large fertilizer
17 manufacturer in Canada; a number of smaller oil
18 companies like Benico, Peride Development. I've
19 worked for a large number of commercial
20 development firms like M&H Realty. And I have
21 worked for many state, county and cities, like the
22 City of San Francisco, the City of El Segundo, the
23 City of Livermore, Orange County, Broward County
24 in Florida; a number of cities in Florida; a
25 number of cities in Connecticut, just to give a

1 sampling.

2 I've also worked for the U.S. Department
3 of Energy, the U.S. Environmental Protection
4 Agency, among others.

5 MR. JOSEPH: And finally, Dr. Fox, are
6 you aware of any published appellate court
7 decisions finding that your testimony constituted
8 substantial evidence for purposes of CEQA?

9 DR. FOX: Yes. The CEQA case known as
10 Berkeley Jets concluded that I was an expert in
11 air quality, and referred to me personally at a
12 number of places in the appellate decision.

13 MR. JOSEPH: Thank you. Now I'd like to
14 turn to impact number 1, which is listed on page 1
15 of the executive summary of the testimony of Dr.
16 Fox and Dr. Pless.

17 And actually, Mr. Fay, before we do that
18 we probably should mark some exhibits.

19 HEARING OFFICER FAY: Okay, if you'll
20 read the name of the exhibit?

21 MR. JOSEPH: We could start with the
22 testimony of Dr. Phyllis Fox and Dr. Petra Pless
23 on behalf of the California Unions for Reliable
24 Energy, dated August 13, 2004.

25 HEARING OFFICER FAY: That will be

1 exhibit 25.

2 MR. JOSEPH: And second, the testimony
3 of Camille Sears on behalf of the California
4 Unions for Reliable Energy, also dated August 13,
5 2004.

6 HEARING OFFICER FAY: Exhibit 26.

7 MR. JOSEPH: That will do it for now.

8 BY MR. JOSEPH:

9 Q First, I'd like to ask each of them
10 individually, Dr. Fox and Dr. Pless, first Dr.
11 Fox, whether exhibit 25 was prepared by you and
12 under your direction in coordination with Dr.
13 Petra Pless?

14 DR. FOX: Yes, it was.

15 MR. JOSEPH: And except to the extent
16 that you will testify here today as to
17 modifications based on new information, does it
18 represent factual evidence that's true in your
19 best professional opinion?

20 DR. FOX: Yes, it does.

21 MR. JOSEPH: Dr. Pless, I'd like to ask
22 you the same two questions. Was exhibit 25
23 prepared by you and under your direction, along
24 with Dr. Fox?

25 DR. PLESS: That's correct.

1 MR. JOSEPH: And to the extent that it
2 contains factual information, is that factual
3 information true and correct, and are the opinions
4 your best professional opinion, except to the
5 extent that you will update information today?

6 DR. PLESS: Yes, that's correct.

7 MR. JOSEPH: Ms. Sears, exhibit 26, was
8 that exhibit prepared by you and under your
9 direction?

10 MS. SEARS: Yes, it was.

11 MR. JOSEPH: And except to the extent
12 that you provide updates today, are the facts
13 contained therein true and are the opinions your
14 best professional opinion?

15 MS. SEARS: Yes, they are.

16 MR. JOSEPH: Okay, now we can turn to
17 impact number one.

18 Dr. Fox, would you summarize what we
19 have listed as significant impact number one?

20 DR. FOX: Impact number one is as
21 follows. The applicant's own modeling, as
22 summarized in the staff's supplemental testimony,
23 indicates that the increase in 24-hour PM10
24 ambient air concentrations would be 97.6 mcg/cubic
25 meter.

1 That concentration, or that increase,
2 due to the project alone, assuming that the
3 background ambient PM10 concentrations were zero,
4 is enough to violate the California ambient air
5 quality standard on 24-hour PM10, which is 50 mcg/
6 cubic meter.

7 MR. JOSEPH: Thank you. Ms. Sears,
8 would you tell us what an ambient air quality
9 standard is?

10 MS. SEARS: Yes. I think probably the
11 easiest way to -- we've already dealt with this a
12 little bit, so I'll keep it pretty generic, but I
13 think you need to break it down into two parts.
14 And the first one is ambient, what is meant by
15 ambient.

16 And as I said earlier I've been doing
17 this kind of air quality modeling for over 23
18 years. And in every case we've always used
19 ambient air as the occurring in the regions
20 outside the property owned by the emission source.
21 In this case it would be the fenceline or beyond
22 in the case of the Riverside Energy Resource
23 Center.

24 And that has been my experience
25 exclusively for the last 23 years that that's how

1 we've dealt with ambient air. And I can remember
2 back to some joint interagency CEQA analysis that
3 we did in Santa Barbara where we had the Santa
4 Barbara County Air Pollution Control District,
5 State Lands Commission, the California Air
6 Resources Board, USEPA, Minerals and Management
7 Service, and I think also the Corps of Engineers,
8 where we were all combined in an EIR/EIS analysis.

9 And this question came up with where do
10 we assess ambient air quality impacts. Do we look
11 at places where people work, live or go to school.
12 Or is it anywhere outside of the facility's
13 property boundary.

14 And in every case it's been unanimous
15 that the ambient air has been defined at the
16 property boundary or beyond the source being
17 assessed.

18 And I was, in fact, a little surprised
19 that this issue even came up again, because I know
20 this has been dealt with so many times that it
21 surprised me a little bit.

22 The other part is standard, what is
23 meant by standard. And California ambient air
24 quality standards are levels which are not to be
25 exceeded for the average and period of concern.

1 And the main pollutant we've been talking about
2 today is particulate matter with aerodynamic
3 diameter of 10 micrograms to 10 micrometers or
4 less, or -- particulates. And that standard is 50
5 mcg/cubic meter. And that standard is set by the
6 State of California to protect the public from
7 adverse health impacts due to exposure of that
8 pollutant.

9 And that standard sets the level at
10 which the state determines that adverse health
11 effects would occur.

12 MR. JOSEPH: Thank you. Dr. Fox, Mr.
13 Walters testified about a margin of safety in
14 setting the ambient air quality standard. Do you
15 have a response to that?

16 DR. FOX: Margins of safety are
17 sometimes used in setting ambient air quality
18 standards. The reason margins of safety are used
19 is because the general population includes a
20 number of sensitive individuals like children, old
21 people or people who are sick.

22 And, of course, those are the kinds of
23 people who usually aren't done in the health
24 studies. So it is typical to use a margin of
25 safety to assure that all members of the public

1 are protected.

2 However, in the case of fine particulate
3 matter there is no margin of safety. Fine
4 particulate matter is what's called a no-threshold
5 pollutant. There have been significant health
6 impacts documented at the lowest concentrations
7 that have been measured.

8 In other words, the 50 mcg/cubic meter
9 is sort of like a negotiated level, and it's
10 understood that significant health impacts occur
11 at levels that are below that 50.

12 There have been extensive studies done
13 by Harvard University on the health impacts of
14 PM10 emissions at levels that are below existing
15 standards. And in all cases there have been
16 documented health impacts including increased
17 mortality, increased hospital admissions due to
18 respiratory problems, asthma and other respiratory
19 issues.

20 MR. JOSEPH: Ms. Sears, have you plotted
21 the applicant and staff construction emission
22 analysis?

23 MS. SEARS: Yes, I modeled their
24 emissions and then plotted -- and came up with air
25 concentrations and plotted those air

1 concentrations onto aerial photos.

2 MR. JOSEPH: Mr. Fay, at this point we'd
3 like to distribute figure 1A, which was emailed
4 last week.

5 HEARING OFFICER FAY: Fine. Okay, but
6 this -- so we're going to mark this. How many
7 figures do you have?

8 MS. SEARS: I have 12, made 12 copies.

9 HEARING OFFICER FAY: Twelve?

10 MS. SEARS: It was 12 copies of four
11 figures.

12 HEARING OFFICER FAY: Four figures?

13 MS. SEARS: Yes.

14 HEARING OFFICER FAY: Four different
15 figures?

16 MS. SEARS: Yes.

17 HEARING OFFICER FAY: Are your figures
18 labeled consecutively?

19 MR. JOSEPH: We have figures 1A, 1B, 2A,
20 2B. They correspond to what were figures 1 and 2
21 in the prepared testimony.

22 HEARING OFFICER FAY: Do you want these
23 marked for identification?

24 MR. JOSEPH: We probably should.

25 HEARING OFFICER FAY: Can we put them

1 all together under exhibit 27-dash, and then
2 according to the figure you have on top of each --

3 MR. JOSEPH: That would be a good idea.

4 HEARING OFFICER FAY: So this one just
5 passed out would be exhibit 27-1A.

6 MR. JOSEPH: Good.

7 BY MR. JOSEPH:

8 Q Ms. Sears, did you prepare exhibit 27-
9 1A?

10 MS. SEARS: Yes, I did.

11 MR. JOSEPH: Would you explain what the
12 blue line represents?

13 MS. SEARS: The blue line on figure 1A
14 represents the region where the 24-hour PM10
15 impacts from the project construction emissions
16 are greater than or equal to 50 mcg/cubic meter.

17 On the line, itself, the concentration
18 is 50 mcg/cubic meter. Within the line, the area
19 within the region, the air concentrations are
20 greater than or equal to 50 mcg/cubic meter.

21 MR. JOSEPH: And just to be clear, you
22 picked 50 mcg/cubic meter because that's the
23 California ambient air quality standard for 24-
24 hour PM10, is that right?

25 MS. SEARS: That's correct.

1 MR. JOSEPH: And to confirm, you did not
2 change any of the applicant's inputs or modeling
3 in preparing this figure. You just plotted it so
4 we could visualize the output, is that right?

5 MS. SEARS: That's correct. I took
6 their emission rates and their modeling inputs and
7 using the results of the air modeling at the
8 various receptors that they had in their receptor
9 files, I plotted the air concentrations created in
10 these regions, and then overlaid them onto these
11 aerial photos that are in this map.

12 MR. JOSEPH: Now, there's been recent
13 suggestion that the applicant may limit its
14 construction to an eight-hour day, so to limit
15 emissions. Did you plot the impacts on 24-hour
16 PM10 assuming only eight hours construction?

17 MS. SEARS: Yes, I did.

18 MR. JOSEPH: Mr. Fay, at this point
19 we're passing out what will be marked exhibit 27-
20 1B.

21 HEARING OFFICER FAY: While that's being
22 passed out, Mr. Joseph, I'll just mention that
23 lunch is ready, and so when there's a convenient
24 breaking spot for you, please let us know.

25 MR. JOSEPH: How about if we have the

1 explanation of this figure, and then break for
2 lunch.

3 BY MR. JOSEPH:

4 Q Ms. Sears, will you tell us what 27-1B
5 shows?

6 MS. SEARS: Yes. Figure 1B is
7 essentially the same as figure 1A, except the air
8 concentrations that are plotted are based on an
9 eight-hour construction day, rather than a 12-hour
10 construction schedule, as in figure 1A.

11 MR. JOSEPH: And, again to confirm, Ms.
12 Sears, you accepted all of the applicant's most
13 recent estimates of the amount of emissions and
14 you plotted them for an eight-hour day, is that
15 right?

16 MS. SEARS: Yes, I accepted all their
17 emission rates and their modeling analyses and
18 then modeled the eight-hour day, and then plotted
19 them on this figure here.

20 MR. JOSEPH: And when you did that, what
21 did the applicant's modeling -- excuse me, what
22 did the applicant's emission rates show as the
23 maximum impact at the fenceline for an eight-hour
24 construction day?

25 MS. SEARS: I believe that the peak 24-

1 hour PM10 concentration from the eight-hour
2 construction emissions was about 65 mcg/cubic
3 meter.

4 MR. JOSEPH: Thank you.

5 Mr. Fay, if you want to break for lunch
6 this would work just fine.

7 HEARING OFFICER FAY: All right. Just
8 before we all rush in there, is Mary Humboldt
9 here?

10 MS. HUMBOLDT: I'll wait till the end of
11 the day to comment.

12 HEARING OFFICER FAY: Oh, all right,
13 that's fine. Ms. Humboldt would like to make a
14 comment and we want to accommodate her. She'll
15 wait till later.

16 Okay, we're going to take a lunch break.
17 Let's try to keep it to about 40 minutes. We'll
18 reconvene after that. We're off the record.

19 (Whereupon, at 12:10 p.m., the hearing
20 was adjourned, to reconvene at 12:40
21 p.m., this same day.)

22 --o0o--
23
24
25

1 AFTERNOON SESSION

2 12:44 p.m.

3 HEARING OFFICER FAY: Mr. Joseph, you
4 wanted the bound collection of documents entitled
5 exhibits of Fox and Pless testimony marked for
6 identification?

7 MR. JOSEPH: Yes. This is the
8 compilation of the supporting documents for the
9 testimony of Drs. Phyllis Fox and Petra Pless.

10 HEARING OFFICER FAY: That will be
11 exhibit 28.

12 Just for the parties' convenience I
13 learned that the transcripts will be expedited and
14 will likely be available on September 8th or 9th.

15 Go ahead, Mr. Joseph.

16 MR. JOSEPH: Thank you, Mr. Fay.

17 DIRECT EXAMINATION - Resumed

18 BY MR. JOSEPH:

19 Q Ms. Sears, the first question I would
20 like to ask you is do you have a response to the
21 statements by Mr. Walters that the modeling of
22 construction impacts is conservative?

23 MS. SEARS: Yes, I do. There's really
24 two parts to this, what makes the modeling
25 conservative. And I'll take care of one part,

1 which is the emission rates, just by saying that
2 we used the applicant's emission rates, so that's
3 not the point I'm going to be commenting on.

4 The other component, itself, is actually
5 the method in which the modeling was performed.
6 And the modeling could have been performed in a
7 more conservative manner.

8 And I think there's several ways that
9 the modeling is not necessarily conservative. One
10 of them is that the emission sources were modeled
11 as either volume or area sources, which kind of
12 distribute the emissions over a larger area.
13 There was some discussion that they were at
14 specific points. But that's not how the applicant
15 modeled the emissions.

16 I plotted the volume sources on the
17 property boundary, and they pretty much filled up
18 the entire site plan where the emission sources
19 were, if you were to lay out the volume and the
20 area sources. It was spread out evenly over the
21 whole facility.

22 Another aspect was that the modeling
23 used urban dispersion coefficients, and in general
24 you get, for this type of area source, you get
25 about three times higher impacts when you model

1 rural dispersion coefficients.

2 And I still think there's a little bit
3 of room for debate as to whether or not the
4 dispersion in that area would be rural or urban,
5 since it's more of a localized effect. But I do
6 go ahead and use the applicant's urban modeling,
7 which compared to rural dispersion, would give you
8 lower impacts.

9 There was also some discussion of the
10 deposition wasn't modeled or used by the applicant
11 in their modeling. And deposition basically is
12 where you have plume particulates deposit or drop
13 out on the ground as they travel downwind. And
14 that makes sense, that's what they do.

15 But I've done a lot of deposition
16 modeling. And what happens is that the way the
17 models work is that the air quality impacts are
18 actually higher close to the source, like at the
19 property boundary, when you use deposition than if
20 you didn't use deposition.

21 And the reason for that is that the
22 model actually reduces the plume height, the
23 height above ground, when you're doing a
24 deposition, in the sense that particles drag the
25 plume closer to the ground. And so in that

1 situation you do get higher impacts closer to the
2 ground and closer to the source when you model
3 deposition.

4 So, from those three aspects alone I
5 don't think the modeling was overly conservative.

6 MR. JOSEPH: Thank you. I'd like to ask
7 you to clarify one other point. Your testimony
8 and Dr. Fox's testimony has been about the 24-hour
9 PM10 standard. And yet construction will be for
10 12 hours at most, and perhaps eight hours. How do
11 you reconcile those two different time periods?
12 How does that work in the modeling?

13 MS. SEARS: When you run the model and
14 it calculates 24-hour average impacts, what it
15 looks at is the air quality concentration for
16 every hour of the day. It calculates 24 hourly
17 air concentrations, midnight to 1:00 a.m., 1:00 to
18 2:00 a.m., and so forth, through the whole day.

19 So you have 24 one-hour values. For the
20 hours of the day when you say that no emissions
21 occur, like the 12 or 16 hours of the day when no
22 construction would occur, the model just decides
23 the concentration is zero to those hours.

24 And then what it does is it adds up all
25 the non-zero concentrations for each hour of the

1 day, and all the zero concentrations for each hour
2 of the day, adds them all together and divides by
3 24.

4 So even though it's a 24-hour average
5 concentration, most of the hours in the day are
6 zero. And so basically what you're getting is a
7 much higher concentration during a few short hours
8 of the day.

9 And typically what you see in a 24-hour
10 average concentration for any modeling that you do
11 that only two or three, maybe four hours of the
12 day, are the ones that contribute most, if not
13 all, of the impact. And that's because the wind
14 direction is fluctuating for each hour that you
15 model of the day. And therefore you have a lot of
16 hours where there's a zero impact.

17 So in essence, again, you get a few
18 hours of a big hit and a lot of hours of nothing.
19 And then you add them all together, and that's how
20 you get the 24-hour average impact.

21 MR. JOSEPH: Thank you. Dr. Fox, are
22 you familiar with the state CEQA guidelines in the
23 accompanying environmental checklist?

24 DR. FOX: Yes.

25 MR. JOSEPH: Have you used it in your

1 work as a professional?

2 DR. FOX: Yes, hundreds of times.

3 MR. JOSEPH: Mr. Fay, I'd like to
4 distribute a copy of the state CEQA guidelines for
5 everybody to look at.

6 HEARING OFFICER FAY: All right.

7 (Pause.)

8 BY MR. JOSEPH:

9 Q Dr. Fox, would you look at the second-
10 to-last page of this document labeled 12 of 13 in
11 the top right corner. Item Roman numeral XVII,
12 which is entitled, mandatory findings of
13 significance.

14 DR. FOX: I didn't get a copy.

15 MR. JOSEPH: Oh, you should probably
16 have one.

17 DR. FOX: Where are you?

18 MR. JOSEPH: Second-to-last page.
19 Entitled, mandatory findings of significance. And
20 if you flip over to the very last page, would you
21 read item 17C for us?

22 MS. SEARS: Okay, 17C under mandatory
23 findings of significance reads: Does the project
24 have environmental effects which will cause
25 substantial adverse effects on human beings,

1 either directly or indirectly."

2 MR. JOSEPH: Would you explain what the
3 relationship is between this mandatory finding of
4 significance and the California ambient air
5 quality standard for PM10?

6 DR. FOX: Yes. The California ambient
7 air quality standard is set at the level that
8 results in significant public health impacts. The
9 increase in emissions from this project alone are
10 enough, all by itself, assuming the background
11 ambient air quality is zero, to cause an
12 exceedance of the California's 24-hour ambient air
13 quality standard. Which, under this guidance, is
14 a mandatory finding of significance.

15 MR. JOSEPH: Dr. Fox, how many CEQA
16 evaluations involving air quality have you been
17 involved in?

18 DR. FOX: I couldn't count exactly; it
19 is several hundred. I have been working on CEQA
20 projects since the statute was adopted in the
21 early 1970s.

22 MR. JOSEPH: And, Ms. Sears, how many
23 CEQA evaluations involving air quality have you
24 been involved in?

25 MS. SEARS: Probably about a hundred.

1 MR. JOSEPH: Dr. Fox, have you ever seen
2 a case where a project that caused a violation of
3 an ambient air quality standard was found not
4 significant?

5 DR. FOX: I never have.

6 MR. JOSEPH: Ms. Sears, have you ever
7 seen a case where a project that caused a
8 violation of an ambient air quality standard was
9 found not significant?

10 MS. SEARS: No, I haven't.

11 MR. JOSEPH: Dr. Fox, is it proper to
12 limit consideration of violations of ambient air
13 quality standards to areas only where people live
14 or work?

15 DR. FOX: No, it's not.

16 MR. JOSEPH: Can you explain?

17 DR. FOX: Ambient air quality standards
18 apply everywhere the public has access to, which,
19 when you're doing an analysis like this, is
20 everywhere outside of the fence boundary of the
21 project.

22 MR. JOSEPH: Ms. Sears, is it proper to
23 limit consideration of violations of ambient air
24 quality standards to areas only where people live
25 or work?

1 MS. SEARS: No. And as I discussed
2 earlier, it's standard practice to always assess
3 ambient air quality impacts at the property
4 boundary or beyond. And that was also done in
5 this analysis here is the applicant modeled
6 fence-line receptors in their air quality impact
7 analysis.

8 MR. JOSEPH: Finally, to summarize with
9 respect to impact one, Dr. Fox, is it your expert
10 opinion based on the facts in the record that
11 there may be a significant environmental impact
12 from increased emissions of 24-hour PM10?

13 DR. FOX: Yes, it is my professional
14 opinion that the increase in 24-hour PM10 from
15 this project would result in a significant air
16 quality impact by exceeding the California 24-hour
17 ambient air quality standards.

18 MR. JOSEPH: Ms. Sears, is it your
19 expert opinion, based on the facts in the record,
20 that there may be a significant impact in the
21 environment from the increase in 24-hour PM10
22 emissions?

23 MS. SEARS: Yes. And, again, it's
24 because the project contribution to the 24-hour
25 average PM10 concentrations exceed the standards,

1 by themselves. And that would, by definition, be
2 a significant impact.

3 MR. JOSEPH: Thank you. I'd like to
4 move to impact number two listed on page 1 of the
5 executive summary of the Fox and Pless testimony.

6 BY MR. JOSEPH:

7 Q Ms. Sears, the existing background air
8 in this area is not pristine, is it?

9 A No, it's not.

10 Q What is the status of the air in terms
11 of the California ambient air quality standard for
12 24-hour PM10?

13 MS. SEARS: The existing, or what we
14 call background air quality, for PM10 in the
15 Riverside area exceeds the state's standards by
16 about a factor of three.

17 MR. JOSEPH: Dr. Fox, can you summarize
18 what significant impact number two is?

19 DR. FOX: Significant impact number two
20 is the increase in 24-hour PM10 due to this
21 project would make a substantial contribution to
22 an existing violation of the California 24-hour
23 ambient air quality standard.

24 MR. JOSEPH: Assuming the applicant is
25 correct in estimating emissions, why do you say

1 that those emissions result in a substantial
2 contribution to the existing violation?

3 DR. FOX: The existing ambient air
4 quality, in terms of 24-hour PM10 is 163 mcg/
5 cubic meter at the point of maximum impact. This
6 project would increase the ambient PM10
7 concentration by 97.6 mcg/cubic meter. That
8 represents a 59 percent increase in an existing
9 violation of a state ambient air quality standard.
10 In my opinion that is a substantial increase.

11 MR. JOSEPH: Dr. Fox, are there any
12 other methods by which you would measure the
13 significance of the contribution for 24-hour PM10?

14 DR. FOX: Another method that is
15 commonly used to determine whether or not a
16 contribution to an existing violation of an
17 ambient air quality standard is to use what are
18 referred to as the significant change thresholds
19 that are published in table A-2 of the South Coast
20 rule 1301.

21 And for 24-hour PM10 the significant
22 change threshold is 2.5 mcg/cubic meter. At the
23 point of maximum impact this project would
24 increase the 24-hour PM10 by 97.6 mcg/cubic meter.
25 Clearly, 97.6 is substantially higher than 2.5.

1 MR. JOSEPH: Dr. Fox, did you misspeak
2 when you said rule 1301?

3 DR. FOX: 1303, thank you.

4 MR. JOSEPH: Thank you. I think we're
5 ready to move to impact number three. And now
6 we're moving from 24-hour PM10 impacts to annual
7 PM10 impacts.

8 BY MR. JOSEPH:

9 Q Ms. Sears, the annual PM10 California
10 ambient air quality standard is separate from the
11 24-hour PM10 standard, is that right?

12 MS. SEARS: That's correct. There are
13 two PM10 standards, different levels for different
14 durations of exposure.

15 MR. JOSEPH: Does the project area
16 comply with the annual PM10 California ambient air
17 quality standard?

18 MS. SEARS: No, it doesn't.

19 MR. JOSEPH: Dr. Fox, can you summarize
20 what significant impact three is?

21 DR. FOX: Significant impact three is
22 the increase in annual PM10 concentrations due to
23 this project would make a substantial contribution
24 to an existing violation of the annual state PM10
25 standards.

1 This project, at the point of maximum
2 impact, would increase the annual PM10
3 concentration by 4.97 mcg/cubic meter. Thus
4 significant change threshold from South Coast rule
5 1303, table A-2 is 1 mcg/cubic meter, so this
6 project would result in a change that is five
7 times higher than the significance threshold that
8 is commonly used to evaluate a change when you
9 have a existing violation of an ambient air
10 quality standard.

11 MR. JOSEPH: Is that change what you
12 refer to as the substantial contribution to the
13 existing violation?

14 DR. FOX: Yes. That would lead one to
15 conclude that the construction of this project
16 would result in a substantial contribution to an
17 existing violation of the California ambient air
18 quality standard.

19 MR. JOSEPH: Dr. Fox, on page 4-16 of
20 Mr. Walters' supplemental testimony he refers to
21 the previous time that we have raised this issue
22 as a baseless contention. Do you have a response
23 to that?

24 DR. FOX: Where is the baseless
25 contention language?

1 MR. JOSEPH: Page 4-16, second paragraph
2 from the bottom.

3 DR. FOX: So, let me read the first two
4 sentences to frame it. It says: CURE also
5 contends that the South Coast Air Quality
6 Management District uses an annual PM10
7 concentration significance criteria of 1.0 mcg/
8 cubic meter. This assertion is incorrect and
9 staff cannot determine why CURE would make this
10 baseless contention."

11 That is absolutely not true. The
12 applicant in this case, itself, relied on the 1
13 mcg/cubic meter change, significant change
14 threshold in evaluating construction emissions.

15 And in my experience it is widely used.
16 I personally have worked on many EIRs in which the
17 1 mcg/cubic meter significance threshold was used
18 to evaluate whether or not a project resulted in a
19 substantial contribution to an existing violation
20 of a nonattainment pollutant.

21 MR. JOSEPH: Dr. Fox, Mr. Lany testified
22 earlier today that it was the intent of the South
23 Coast Air District not to apply the significance
24 change threshold to construction. Is that
25 correct?

1 DR. FOX: Rule 1303 -- well, the South
2 Coast does not have jurisdiction over construction
3 because construction involves mobile sources, and
4 the South Coast jurisdiction is limited to point
5 sources.

6 However, that threshold is widely used
7 for more than just point sources. And there's a
8 number of reasons why that's true. Those
9 thresholds were the South Coast's conclusions of
10 what would constitute a significant change in
11 ambient air quality when the underlying standard
12 is already in violation.

13 The significance of a change doesn't
14 depend on the source of the emissions. In other
15 words, if the emissions come from a power plant
16 stack or a refinery stack or the exhaust pipe of a
17 scraper doesn't really make any difference. The
18 point is is that's the level at which the South
19 Coast has concluded in its rulemaking that a
20 change in air quality would be considered to be
21 substantial.

22 MR. JOSEPH: Ms. Sears, did you plot the
23 applicant's modeling of annual PM10 for both 12-
24 hour and eight-hour construction days?

25 MS. SEARS: Yes, I did.

1 MR. JOSEPH: Mr. Fay, at this point
2 we'll distribute what will be exhibits 27-2A and
3 2B.

4 (Pause.)

5 HEARING OFFICER FAY: Go ahead, Mr.
6 Joseph.

7 BY MR. JOSEPH:

8 Q Ms. Sears, will you explain what figures
9 27-2A and 27-2B show?

10 MS. SEARS: Yes. Again, these two
11 figures are aerial photo of the project area
12 showing the Riverside Energy Resource Center
13 property boundary.

14 And then also what they show are the
15 regions where the annual average PM10 impacts from
16 the project construction emissions will equal or
17 exceed air concentration of 1 mcg/cubic meter.

18 On the line, the red line in these
19 figures, that is where the ambient air
20 concentration is equal to 1 mcg/cubic meter over -
21 - averaged over a year. And anything within that
22 region, inside that region, the air concentrations
23 on an annual average basis would be greater than 1
24 mcg/cubic meter.

25 And the two figures represent the 1

1 mcg/cubic meter exposure region for a 12-hour and
2 an eight-hour construction schedule respectively.

3 MR. JOSEPH: Thank you. Again, to
4 confirm, in making these plots you accepted all of
5 the applicant's most recent estimates of emissions
6 and plotted the result, is that right?

7 MS. SEARS: That's correct.

8 MR. JOSEPH: Dr. Fox, to summarize, is
9 it your expert opinion based on the facts in the
10 record that there may be a significant impact on
11 the environment from the increase in annual PM10?

12 DR. FOX: Yes. The construction of this
13 project will result in a substantial contribution
14 to an existing violation of the annual PM10 air
15 quality standard in that area where the violation
16 will occur, as the area shown within the red
17 isopleth on figures 2A and 2B.

18 MR. JOSEPH: We can move to impact
19 number four, now. Impact four is another way to
20 determine if 24-hour PM10 impacts are significant.
21 Dr. Fox, could you explain what that method of
22 determining significance is?

23 DR. FOX: That method is referred to as
24 the local significance threshold method. It's a
25 recent procedure that was adopted by the South

1 Coast Governing Board to be used to evaluate the
2 impact primarily of small projects under a unique
3 set of circumstances.

4 It basically sets a threshold of 10.4
5 mcg/cubic meter at the nearest sensitive receptor.
6 And if the concentration exceeds 10.4 micrograms
7 at the nearest sensitive receptor on a screening
8 basis that's considered to be a significant impact
9 for CEQA purposes.

10 MR. JOSEPH: Ms. Sears, both the
11 applicant and staff say that the impact at the
12 nearest residence that was modeled is 10.23
13 mcg/cubic meter. Did they report the correct
14 number for concentrations at that location?

15 MS. SEARS: I took a close look at the
16 location of the nearest residence to the Riverside
17 Energy Resource Center site, and it's already been
18 discussed a little bit about how our coordinates
19 were slightly different than the applicant's.

20 But what I did is I took the detailed
21 mapping analysis to find out exactly where the
22 location of the house would be with respect to the
23 emission sources on the site. And I modeled them
24 with what I believe are the correct locations.
25 And we got a concentration that was slightly

1 greater than 10.4 mcg/cubic meter.

2 MR. JOSEPH: Ms. Sears, why are you so
3 sure that you mapped the house in the right spot?

4 MS. SEARS: Well, it was a little
5 confusing because, as we talked about before, the
6 initial modeling from the applicant didn't include
7 the house. And then they did include a location
8 for the house in their modeling, but it just
9 didn't seem right to me.

10 And then so in our earlier testimony I
11 modeled what I thought was the location of the
12 house. Since then I saw that the applicant has
13 remodeled it again and moved it again slightly,
14 slightly to the north and to the west from where
15 it was before. But it's still, I don't think, in
16 the right place.

17 And the reason I think I put it in the
18 right place was that based on geographic
19 information system you can use a technique called
20 georeferencing. It's much the same approach that
21 say a surveyor would use, where you pinpoint one
22 corner and then from that location in that one
23 corner you can pretty much determine where
24 everything else is around there.

25 And using measuring functions in

1 ARCVIEW, which is a geographic information system,
2 and then using two different maps, using the
3 aerial photo and also the topographic map in the
4 GIS, I determined exactly where the house would
5 be. And that's what I modeled.

6 MR. JOSEPH: Ms. Sears, do you have any
7 particular qualifications to do this mapping
8 function?

9 MS. SEARS: Well, I've been doing
10 mapping for about 15 years, and I have used a
11 number of different geographic information systems
12 from MapViewer to MapInfo to Atlas GIS and
13 ARCVIEW, and I have been involved in beta testing
14 a number of GIS programs over the years. And this
15 is one of the things I always look for, to see how
16 accurate they are in determining where the source
17 and receptors are. Because as a modeler that's
18 the chief thing that I'm interested in.

19 MR. JOSEPH: Have you either received or
20 taught any courses in the subject?

21 MS. SEARS: Yes, I've taught courses on
22 this exact preparation of these figures that we've
23 been looking at, figures 1A and 1B, 2A and 2B.
24 I've taught them at -- through UCSB over the years
25 and showing people how to use both map info and

1 Atlas GIS in preparing these maps.

2 MR. JOSEPH: To summarize, Ms. Sears, is
3 it your expert opinion, based on the facts in the
4 record, that there may be a significant impact on
5 the environment from construction of this project
6 with respect to 24-hour PM10, if construction
7 takes place 12 hours per day?

8 MS. SEARS: Yes.

9 MR. JOSEPH: Now, if construction were
10 limited to eight hours per day, based on the
11 applicant's emission estimates would there be a
12 significant impact?

13 MS. SEARS: There wouldn't be a
14 significant impact at the location of the nearest
15 residence, no. Because based on an eight-hour
16 construction schedule the concentrations at that
17 nearest residence would be less than 10.4
18 mcg/cubic meter.

19 MR. JOSEPH: And you can see that in
20 figure 1B, which is exhibit 27-1B, is that right?

21 MS. SEARS: Yes, that's correct.

22 MR. JOSEPH: Now, Ms. Sears, if exposure
23 was limited to only four hours per day, would that
24 necessarily eliminate or greatly reduce the
25 exposure?

1 MS. SEARS: As I discussed earlier not
2 necessarily. Because, again, in any averaging
3 period that you're modeling, whether it's eight,
4 12 or 24 hours, most of the impacts occur just
5 from one, two or three, possibly four hours of the
6 day.

7 In fact, when I used to do proposition
8 65 on compliance for the State Attorney General's
9 Office, and we did this on hundreds of projects,
10 when we were looking at acceptable daily intake
11 for reproductive toxics, things like lead or
12 ethylene oxide, those are based on a 24-hour
13 average impact, just like the PM10 concentrations
14 are.

15 And we would look at two things. We
16 would look at their hour -- average emission rate
17 for every hour of the day. And we'd also look at
18 their peak one-hour emission rate of a given day.
19 And for that peak one-hour emission rate we would
20 divided it by 24.

21 And then we'd compare the two
22 concentrations, one with the peak one hour divided
23 by 24 hours, and then the average lower emission
24 rate that occurred maybe 12 -- 24 hours a day, and
25 compare the concentrations calculated by both

1 approaches.

2 And often the one-hour impact, which was
3 based on the highest one-hour emissions divided by
4 24, was higher than the other approach.

5 MR. JOSEPH: Dr. Fox, according to the
6 South Coast Air District, is a residence a
7 sensitive receptor under the LST protocol?

8 DR. FOX: A residence is one of the
9 possible sensitive receptors.

10 MR. JOSEPH: Can you provide for us the
11 information from the South Coast which supports
12 that statement?

13 DR. FOX: Yes. The report that was
14 prepared in support of the 10.4 mcg/cubic meter
15 LST significance threshold elaborates in a number
16 of places on what a sensitive receptor is. And
17 it's not limited to just a residence.

18 And I'll read a bit out of that
19 document. Receptor locations are offsite
20 locations where persons may be exposed to the
21 emissions from project activities. Receptor
22 locations include residential, commercial and
23 industrial land use areas, and any other areas
24 where persons can be situated for an hour or
25 longer at a time.

1 These other areas include parks, bus
2 stops and sidewalks, but would not include the
3 tops of buildings, roadways or permanent bodies of
4 water such as oceans and lakes.

5 For purposes of a CEQA analysis the
6 South Coast Air Quality Management District
7 considers a sensitive receptor to be a receptor
8 such as a residence, hospital, convalescent
9 facility where it is possible that an individual
10 could remain for 24 hours. Commercial and
11 industrial facilities are not included in the
12 definition of sensitive receptors because
13 employees do not typically remain onsite for a
14 full 24 hours, but are present for shorter periods
15 of time, such as eight hours.

16 That is from page 3-2 of the document
17 called, draft localized significance threshold
18 methodology.

19 MR. JOSEPH: Thank you. Now I want to
20 turn specifically to the issue of significance.
21 The impacts we've been talking about so far,
22 impacts one through four, except for purposes of
23 discussion all of the applicant's estimates of
24 emissions and the emissions that staff is relying
25 on, as well.

1 The staff, however, concludes that these
2 impacts are not significant, and the staff does
3 not use South Coast's -- emission standards or any
4 other quantitative measures, as Mr. Walters
5 explained.

6 In your expert opinion, Dr. Fox, are the
7 South Coast standards of significance appropriate?

8 DR. FOX: In my opinion they are.

9 MR. JOSEPH: Pardon?

10 DR. FOX: In my opinion they are.

11 MR. JOSEPH: Have these thresholds
12 actually been used for CEQA analyses?

13 DR. FOX: These South Coast emission
14 significance thresholds, in my experience, are
15 used in all of the CEQA documents that I have
16 personally been involved in in South Coast.

17 And they're used in addition to other
18 significance thresholds, such as the rule 1303 of
19 table A-2, significance thresholds that we just
20 discussed, ambient air quality standards.

21 MR. JOSEPH: Dr. Fox, staff expressed
22 concern that it wanted to create a level playing
23 field and applied statewide significance
24 standards. Is that appropriate?

25 DR. FOX: I think it's appropriate to

1 apply statewide standards, but I don't think it's
2 appropriate to ignore local significance
3 thresholds which, when used, would indicate a
4 significant impact based on the judgment of local
5 agencies and based on unique and local conditions.

6 MR. JOSEPH: Dr. Fox, in your
7 professional opinion, is exceeding a South Coast
8 Air Quality Management District's significance
9 threshold a significant impact in the South Coast
10 Air Basin?

11 DR. FOX: Yes, it is.

12 MR. JOSEPH: Now, on page 4-25 of Mr.
13 Walters' supplemental testimony he compares this
14 project to two other SPPE projects. Have you
15 looked at that comparison?

16 DR. FOX: Yes, I have.

17 MR. JOSEPH: Does that comparison change
18 your opinion of the significance of the impacts
19 here?

20 DR. FOX: No, it doesn't.

21 MR. JOSEPH: Can you explain why?

22 DR. FOX: Well, first the projects are
23 located in different areas, so there's different
24 unique conditions that have to be considered. For
25 example, the meteorological conditions are

1 different in each of the three areas. So you're
2 comparing apples and oranges.

3 The last line on the table summarizes
4 the emissions for the three projects. The
5 emissions from this project are 62.51 pounds per
6 day, which are higher than the emissions from the
7 other two projects. Now if the applicant agrees
8 to limit construction to eight hours a day, that
9 would make the emissions from the three projects
10 more comparable. But still even making that
11 adjustment, the emissions from this project would
12 still be somewhat higher.

13 Turn the page and look at page 4-26,
14 which summarizes the model concentrations. In the
15 case of this project the concentration that's
16 reported there is at the nearest offsite sensitive
17 receptor which in this case has been defined to be
18 a residence, that number is 10.23 mcg/cubic meter.

19 However, the concentration at the point
20 of maximum impact is 97.6 mcg/cubic meter. I'm
21 not certain whether the reported concentrations
22 for the other two projects, the greater than 20
23 and the 13, are at the maximum receptor, or
24 whether they're maximum offsite impacts. But
25 assuming that they are maximum offsite impacts,

1 which is usually what's reported, this is the
2 first case that I have seen in which the 10.4
3 mcg/cubic meter threshold at the nearest residence
4 has been used.

5 So assuming that those other two are
6 maximum offsite impacts are substantially lower
7 than the 97.6 mcg/cubic meter maximum impact that
8 was modeled in this case.

9 MR. JOSEPH: Thank you. Now I'd like to
10 skip over temporarily impact number five, which
11 deals with the accuracy of the emission estimates,
12 and jump to significant impact six, which also
13 accepts the estimates of emissions.

14 And when we move to significant impact
15 number six we're now moving from PM10 to NOx.

16 Dr. Fox, can you explain significant
17 impact number six?

18 DR. FOX: Yes. The NOx emissions from
19 constructing this project exceed the applicant's
20 NOx emissions from construction of this project,
21 exceed the South Coast construction emission
22 significance threshold for NOx.

23 MR. JOSEPH: Can you give us those
24 numbers?

25 DR. FOX: Yes. The applicant's

1 construction NOx emissions are found in staff's
2 supplemental testimony and air quality table 10,
3 which is on page 4-3. The total NOx emissions on
4 the maximum day, as estimated by the applicant for
5 construction of this project, is 134.9 pounds per
6 day.

7 The South Coast construction emissions
8 significance threshold is found in tab H of my
9 direct written testimony, which is exhibit 25 --
10 28 --

11 MR. JOSEPH: The exhibit is 28.

12 DR. FOX: -- 28, tab H, page 6. Yes,
13 tab H, page 6-2. It's page 6-4. Under section
14 6.4, which is captioned, construction emission
15 thresholds for SCAB and Coachella Valley. SCAB is
16 the South Coast Air Basin.

17 If you look at the language in bold
18 underneath the inset numbers the line that starts
19 with "However", it reads: However, if emissions
20 on an individual day exceed 75 pounds a day for
21 ROT or 100 pounds a day for NOx, or 550 pounds a
22 day for CO, or 150 pounds a day for PM10 and SOx,
23 the project should be considered significant."

24 So, the significance threshold in the
25 South Coast for construction for NOx is 100 pounds

1 per day. And the applicant's own emission
2 estimates indicate that the construction emissions
3 are 144 pounds per day, which exceeds the
4 threshold.

5 MR. JOSEPH: I think you may have
6 misspoken there? You said 144?

7 DR. FOX: I may have -- 134.9.

8 MR. JOSEPH: Okay. Now, let's move back
9 to impact number five. All of the prior impacts
10 that you testified to assumed that the applicant's
11 and staff's estimate of construction emissions was
12 correct. Now I want to ask some questions about
13 revising the estimate.

14 First, Dr. Fox, can you give us the
15 history of the different versions of emission
16 calculations that the applicant has presented?

17 DR. FOX: The applicant presented an
18 initial set of construction emission calculations
19 in its application. And these were the basis of
20 the construction emissions that staff relied on in
21 the draft initial study on this project.

22 We filed extensive comments on the
23 methods that were used by the applicant in those
24 calculations. And in response, the applicant
25 presented a brand new set of construction emission

1 estimates in their prefiled direct testimony,
2 which I think was submitted on August 12th --

3 MR. JOSEPH: 13th.

4 DR. FOX: -- 13th. Staff's original
5 direct prefiled testimony was based on the initial
6 set of construction emission estimates from the
7 application. and our initial prefiled testimony,
8 which was also filed on August 13th, was based on
9 that same initial set of calculations.

10 So, August 13th rolls around and we're
11 suddenly confronted with our direct testimony,
12 which is based on the original set of calculations
13 from the application, and a brand new analysis by
14 the applicant which uses not only different
15 equations and calculation procedures, but also
16 rolls in new information on silt content.

17 And in response to this brand new
18 analysis staff then filed supplemental air quality
19 testimony incorporating the applicant's brand new
20 analysis.

21 MR. JOSEPH: Dr. Fox, do you agree that
22 the new estimate by the applicant of construction
23 emissions is accurate?

24 DR. FOX: No, it is not accurate.

25 MR. JOSEPH: Can you explain which

1 portions of it are not accurate? First, let me
2 ask a different way.

3 First, can you explain the changes that
4 were made that respond to issues previously raised
5 by CURE and that you now agree with? Let's do
6 those first.

7 DR. FOX: Well, the applicant did
8 address some of our comments on the initial
9 construction emission estimates. But in the
10 process of doing that they created more problems.

11 One of the things that we had commented
12 on is in the material handling portion of their
13 calculations they had assumed that only 120,000
14 pounds per day of material would be moved on a
15 maximum day.

16 We used the information in the
17 geotechnical report to estimate that if you follow
18 the recommendations of the geotechnical reports
19 for developing the site, that the estimate would
20 be more like 2.7 million pounds per day, not
21 120,000 pounds per day.

22 MR. JOSEPH: Let me interrupt you there.
23 I think you may have misspoken. Your prior
24 estimate of the amount of material handled was
25 what?

1 DR. FOX: 2.7 million pounds a day.

2 MR. JOSEPH: Do you want to check your
3 notes? In the prefiled testimony it says 1.7.

4 DR. FOX: Oh, excuse me, okay. Thank
5 you. Well, we estimated 1.7 million pounds a day,
6 and that was compared with 120,000. The applicant
7 revisited the amount of material handled and came
8 up with an additional 1.2 million pounds per day.
9 Added a new source of emissions, which is scraper
10 drop emissions.

11 So they retained the original 120,000
12 and they added to that 1.2 million, which they
13 categorized as scraper drop emissions. So their
14 revised calculations are based on 1.32 million
15 pounds per day, which is in the ballpark of what
16 we estimated. We're comfortable with 1.32
17 million, close enough to 1.7.

18 The problem arises in the way that they
19 calculated scraper drop emissions. They used an
20 equation to estimate scraper drop emissions from
21 what is called AP-42 in the trade. AP-42 is EPA's
22 emission estimating bible, which is used in cases
23 where you don't have site-specific information to
24 estimate emissions.

25 And they picked an emission factor out

1 of AP-42 for scraper drop emissions. It turns out
2 that that emission factor is what is referred to
3 as a mine-specific emission factor.

4 I would first like to refer you to page
5 11.9-4, the page numbers are in the lower left-
6 hand corner. And the middle paragraph that starts
7 with "The factors." The third sentence in that
8 paragraph reads: A mine-specific emission factor
9 should be used only if the characteristics of the
10 mine for which an emission estimate is needed are
11 very similar to those of the mine for which the
12 emission factor was developed."

13 And I'd like you to turn to page 11.9-
14 11, and the page number is in the lower right-hand
15 corner this time, that contains a continuation of
16 table 11.9-4. The third item on that table says
17 scraper unloading batch drop. The emission factor
18 that the applicant used to estimate scraper
19 emissions in this case is in the column labeled
20 PSP Emission Factor. And it's 0.04 pounds of
21 particulate matter per ton of material handled.

22 They also apply a factor to convert it
23 to PM10, but that's not at issue here.

24 If you look to the column to the left of
25 that emission factor it says, mine location. And

1 it says Roman iv, that is decoded on the next
2 page, which is table 11.9-5. If you look in the
3 far left-hand column under mine, under Roman iv,
4 you will see that the emission factor that the
5 applicant used to estimate scraper drop emissions
6 from 1.2 million pounds of material in this case
7 is applicable only to lignite mines in central
8 North Dakota.

9 MR. JOSEPH: Dr. Fox, could you identify
10 the source of this document?

11 DR. FOX: This is a chapter out of AP-
12 42. It's section 11.9 on western surface coal
13 mining.

14 MR. JOSEPH: Mr. Fay, could we have this
15 marked as the next exhibit in order.

16 HEARING OFFICER FAY: That's exhibit 29,
17 entitled, 11.9 western surface coal mining.

18 BY MR. JOSEPH:

19 Q Dr. Fox, is there a supporting document
20 to support what's contained in AB-42?

21 A Yes.

22 (Pause.)

23 MS. DeCARLO: Mr. Fay, I don't know if
24 this is important or not, but it appears that the
25 newly marked exhibit 29 already is present in

1 exhibit 28. It's contained in the large ream.

2 HEARING OFFICER FAY: Which tab?

3 MS. DeCARLO: Tab G.

4 HEARING OFFICER FAY: Can you confirm
5 that, Mr. Joseph?

6 MS. DeCARLO: It's about half way
7 through tab G.

8 HEARING OFFICER FAY: Let's just leave
9 it marked as it is.

10 MR. JOSEPH: It may well be there; I'm
11 not sure all of the pages are there.

12 MS. DeCARLO: They are.

13 HEARING OFFICER FAY: Thank you. We'll
14 leave it marked as it is.

15 BY MR. JOSEPH:

16 Q Dr. Fox, could you identify the next
17 document which was distributed?

18 DR. FOX: I don't have a next document.

19 MR. JOSEPH: Can you identify the next
20 exhibit, please?

21 DR. FOX: The next exhibit is -- this is
22 a report prepared for the USEPA to update the
23 emission factors for AP-42, section 11.9, western
24 surface coal mining, dated September 1998.

25 MR. JOSEPH: Mr. Fay, can we have this

1 marked as the next exhibit?

2 HEARING OFFICER FAY: Exhibit 30.

3 MR. JOSEPH: Thank you.

4 BY MR. JOSEPH:

5 Q Dr. Fox, if the AP-42 emission factor
6 that the applicant used for scraper drop
7 operations is incorrect, do you have an opinion as
8 to what emission factor should have been used, and
9 what the source of that would be?

10 DR. FOX: Well, this document you just
11 handed me is the wrong one to answer that question
12 with.

13 MR. JOSEPH: I'm not referring to that
14 document.

15 DR. FOX: Okay. Clearly an emission
16 factor of a lignite mine in central North Dakota
17 is not applicable to a construction site in
18 Riverside, particularly when the soil types are
19 dramatically different.

20 If you look at the AP-42 report you'll
21 find that the soil types are loamy sand and soils,
22 and here we have diorite-based weathered material.
23 So that emission factor is clearly not applicable.

24 However there are other emission factors
25 for scraper operations that are relevant. The

1 South Coast Air Quality Management District
2 conducted or commissioned a study at the Midwest
3 Research Institute specifically to update the
4 emission factors in AP-42 for purposes of
5 estimating emission inventories from construction.

6 And that report presents an updated
7 estimate of emissions from scraper operations,
8 which, in my experience, is what is normally used
9 when one estimates emissions from scrapers.

10 MR. JOSEPH: Mr. Fay, can we have this
11 marked as exhibit 31, please.

12 HEARING OFFICER FAY: The MRI report,
13 improvement of specific emission factors, is that
14 correct?

15 MR. JOSEPH: Yes.

16 HEARING OFFICER FAY: Exhibit 31.

17 BY MR. JOSEPH:

18 Q Dr. Fox, does exhibit 31 have a specific
19 emission factor for the equipment which will be
20 performing the operation on this project?

21 DR. FOX: Yes. This report includes an
22 emission factor for the specific model of scraper
23 that's going to be used on this project. And that
24 can be found in table 5 on page 4-7. Table 5 is
25 mean emission rates for scrapers.

1 MR. JOSEPH: And can you identify what
2 makes this applicable to the equipment that will
3 be used on this project?

4 DR. FOX: The applicant's revised
5 construction emission estimates include two
6 Caterpillar model 623 scrapers. And the data in
7 this table under the 20 cubic yard column
8 corresponds to emission factors for the
9 Caterpillar 623 scraper which will be used in this
10 case.

11 If you look down at the bottom, the
12 geometric mean is 45 pounds per scraper hour. And
13 that's an uncontrolled emission factor.

14 MR. JOSEPH: Have you used this MRI
15 report before?

16 DR. FOX: Yes, I have.

17 MR. JOSEPH: For whom?

18 DR. FOX: The first place I ran into
19 this report was in work that I was doing for
20 Unocal, developing estimates for a very large
21 construction project. And myself and other
22 consultants that were working on that project used
23 this report to estimate construction emissions.

24 It contains more than just scrapers. It
25 contains emission factors for all of the common

1 earthmoving equipment that you would expect to
2 find.

3 MR. JOSEPH: Are you recommending that
4 the Commission rely on the highest estimated
5 emission factor for a Caterpillar 623?

6 DR. FOX: No. If you look at table 5
7 you will see that the emission factors for
8 scrapers range all the way up to 114 pounds per
9 scraper hour.

10 In the revised calculations that I did I
11 used 45.

12 MR. JOSEPH: Thank you. Now, we started
13 this by my asking you whether you agreed with the
14 new estimate of construction emissions, and you
15 said that you now believe that the amount of
16 material handled was in the ballpark.

17 Let me ask you about the hours of
18 construction.

19 DR. FOX: We originally -- well, the
20 applicant, in their initial estimate of
21 construction emissions, reported them for an
22 eight-hour day, while the staff's condition of
23 exemption allowed an 11-hour day. So we commented
24 on that discrepancy.

25 The discrepancy remains. The condition

1 of exemption in staff's rebuttal or supplemental
2 testimony is still 11 hours per day. And the
3 applicant's revised construction emissions is
4 still based on an eight-hour day.

5 However, we've heard testimony tomorrow
6 that the applicant is willing to accept a
7 condition of exemption limiting the hours of
8 operation to eight hours a day.

9 If the Commission imposes that condition
10 of exemption then my comment on hours of operation
11 is satisfied.

12 MR. JOSEPH: Thank you. Now, let's move
13 to the ever popular topic of silt content, which
14 for better or worse, has consumed large amounts of
15 time.

16 First, Dr. Fox, can you tell us why the
17 amount of silt disturbed during construction
18 matters for air quality?

19 DR. FOX: Silt is an indicator of the
20 amount of PM10 that will be emitted into the air
21 from construction operations by disturbing soils
22 primarily during the earthgrading phase.

23 MR. JOSEPH: How did you estimate silt
24 content for calculating PM10 emissions?

25 DR. FOX: We were confronted with a

1 quandary when we set about to estimate silt
2 content. We were confronted with a quandary when
3 we set about to estimate construction emissions,
4 because in this case a grading plan has not been
5 provided.

6 It's common in AFC proceedings to have a
7 grading plan and a detailed construction schedule,
8 which is normally the basis of construction
9 estimates. In this case we didn't have that.

10 And in an attempt to bound what the PM10
11 emissions from construction would be, we studied
12 the geotechnical reports which laid out
13 recommendations for the building site. And the
14 geotechnical reports basically said that overlying
15 soil and fill material would need to be removed.
16 And the upper layer of weathered bedrock would
17 also need to be removed and replaced with a more
18 stable foundation, which the applicant has
19 testified would be gravel.

20 So, as you heard Mr. Baldwin testify to
21 yesterday, there are basically three types of
22 material on this site. There's bedrock, there's
23 fill and there's topsoil. And we don't know where
24 the fill and where the topsoil is.

25 So, to develop an estimate of PM10

1 emissions what I did was set out three cases which
2 I hoped would bound the range of likely PM10
3 emissions on the lower end and upper end, and what
4 I hoped would be kind of a reasonable middle of
5 the road.

6 On the upper end I assumed that on the
7 maximum day, and you estimate construction
8 emissions on the maximum day, I assumed on that
9 maximum day that all of the mass grading would
10 only be handling fill soil. And for that case I
11 assumed an average silt content based on the
12 geotechnical report, visual observations of silt
13 content. Because there are no sieve analyses for
14 the that upper layer of silt soil.

15 So, the worst case I assumed was all
16 fill soil being handled on the maximum day; and a
17 silt content based on visual observations of the
18 silt content in that fill soil, because at that
19 time there was no other data.

20 For the lower bound I assumed that on
21 the maximum day only weathered bedrock would be
22 disturbed by scrapers. And for that I used the
23 then only available sieve analyses which
24 originated from drill cuttings from the auger used
25 to bore a couple of holes. And the average number

1 there was 13.2 percent.

2 So I assumed only weathered bedrock
3 would be handled on the maximum day and did an
4 estimate. So that was the lower bounds. And I
5 have the upper bound.

6 For the middle of the road approach I
7 assumed that some bedrock and some soil fill would
8 be disturbed. But the quandary was how much of
9 each. And I decided to weight the amount of
10 bedrock and the amount of fill soil based on the
11 total volume of each material that would have to
12 be disturbed to develop the site.

13 I had Mr. Baldwin estimate cubic feet of
14 soil fill that would have to be removed based on
15 the recommendations in the geotechnical report.
16 And cubic feet of weathered bedrock that would
17 have to be removed to get down to competent rock.
18 And I used those two numbers to weight the fill
19 soil content of 28 percent and the bedrock content
20 of 13 percent to come up with a weighted average.
21 And that number turned out to be 21 percent silt.

22 That was the number that we did
23 additional modeling on. We assumed the emissions
24 from 21 percent silt content and we did additional
25 air quality modeling on that number.

1 And that's what's in my prefiled
2 testimony.

3 MR. JOSEPH: Dr. Fox, Mr. Johnston
4 yesterday presented four new data points for the
5 new samples he took using a backhoe. Do these new
6 data points change your estimate of the level of
7 silt in the surface soil?

8 DR. FOX: Yes.

9 MR. JOSEPH: Can you explain?

10 DR. FOX: Mr. Johnston presented sieve
11 analyses for four additional trenches that were
12 close to previous trenches where he had visual
13 observations of the silt content. And if you
14 compare the visual observations from the previous
15 trenches with the sieve analyses from the new
16 samples what you see is that Mr. Johnston's visual
17 observations in the field were high, roughly by
18 about 10 percent.

19 So the 28 percent fill soil silt content
20 that I used in my previous analysis to bound the
21 upper end of the range is high by 10 percent.
22 Rather than being 28 percent, it's more like 18
23 percent.

24 MR. JOSEPH: Dr. Fox, the applicant's
25 witness distinguished between 75 micron silt and

1 10 micron PM10. In making your PM10 emission
2 estimate did you account for that difference?

3 DR. FOX: Yes, that is explicitly
4 accounted for in the equations in which silt
5 content occurs. All of these emissions are based
6 on an equation where it's emissions equal x times
7 y times z . And one of those variables is silt
8 content based on 75 microns. It's the same
9 equations the applicant used.

10 The fact that silt content is based on a
11 75 micron particle is explicitly taken into
12 account in the equation, itself, and used to
13 calculate PM10.

14 MR. JOSEPH: Dr. Fox, is there a third
15 area which you continue to disagree with the
16 applicant's estimate?

17 DR. FOX: Yes. The primary method used
18 to control PM10 emissions from construction is
19 watering. The applicant will use water trucks to
20 create a fine spray to keep the dust under
21 control.

22 And in applying that mitigation measure
23 the applicant assumed the upper end of the range
24 of control efficiencies. The South Coast Air
25 Quality Management District CEQA handbook contains

1 a series of tables that report the range of
2 control efficiencies that you can expect for each
3 mitigation measure, including watering.

4 I believe those tables were an exhibit
5 to my prefiled testimony.

6 MR. JOSEPH: Tab H, as in Harry.

7 DR. FOX: So, again, turning to tab H,
8 let us first turn to page 11-15, which is table
9 11-4, mitigation for PM10 emissions construction.
10 The fourth bullet is water active sites at least
11 twice daily. And the control efficiency range is
12 34 percent to 68 percent. The applicant assumed
13 68 percent.

14 If you turn the page to 11-16 this is a
15 table that summarizes similar information for
16 unpaved roads. You look at the first bullet, it
17 says applying water three times daily. And the
18 control efficiency in the PM10 column is 45 to 85
19 percent. The applicant assumed 85 percent.

20 So wherever a control efficiency was
21 assumed corresponding to the mitigation measures,
22 the upper end of the range was always assumed. In
23 my experience it's very difficult to achieve the
24 upper end of the range.

25 The typical number that you see that's

1 usually assumed, and based on my own experience,
2 is 50 percent. The South Coast CEQA guidelines
3 elsewhere, and I don't believe it's under tab H,
4 but if you have the whole CEQA guideline,
5 elsewhere in there they explain that the upper end
6 of the range is only acceptable under certain
7 conditions. And one of those conditions is if in
8 addition to watering you use chemical suppressants
9 for dust control. That's discussed in my
10 testimony.

11 The applicant had not proposed to comply
12 with those additional conditions that are laid out
13 in the South Coast CEQA guidelines when you rely
14 on the upper end of the range.

15 MR. JOSEPH: Dr. Fox, would you like a
16 little break before we sum up this area?

17 DR. FOX: Sure.

18 HEARING OFFICER FAY: Okay, let's take a
19 five-minute break.

20 (Brief recess.)

21 HEARING OFFICER FAY: Let's go forward.

22 BY MR. JOSEPH:

23 Q Dr. Fox, what did the applicant use for
24 total PM10 emissions from construction?

25 A It's indicated in staff's supplemental

1 testimony in air quality table 10, page 4-3, the
2 total PM10 construction emissions are 86 pounds
3 per day.

4 MR. JOSEPH: And what was the onsite
5 portion of those emissions?

6 DR. FOX: The onsite portion of those
7 emissions is 41.67, or 42 pounds per day.

8 MR. JOSEPH: Thank you. Now, putting
9 together each of your three areas that you
10 testified to, the silt content, watering and
11 emissions scraper drop operations, by roughly how
12 much did the applicant underestimate onsite PM10
13 emissions from construction?

14 DR. FOX: By about a factor of five.

15 MR. JOSEPH: In terms of pounds per day?

16 DR. FOX: 209 pounds per day.

17 MR. JOSEPH: I think we're failing to
18 communicate here. Let's go through this one at a
19 time. You said the applicant had 42 pounds per
20 day as its onsite emission estimate.

21 DR. FOX: Yes.

22 MR. JOSEPH: How many pounds per day
23 were scraper drop operations underestimated?

24 DR. FOX: Of that 42 pounds per day, 21
25 pounds per day is due to scraper drop and other

1 scraper and earthmoving activities.

2 MR. JOSEPH: And by how much were those
3 underestimated?

4 DR. FOX: If you consider the silt
5 content issue, the watering control efficiency
6 issue, and the scraper operation issue that we
7 previously discussed, those are underestimated by
8 about a factor of nine.

9 That's including all of the various
10 sources of error that I previously testified to.

11 Try your question again. I'm not
12 understanding what you're asking me, I guess.

13 MR. JOSEPH: My apologies, Mr. Fay. We
14 tried to genuinely incorporate the testimony that
15 was provided yesterday in terms of silt content
16 and revise our estimates accordingly. And that's
17 why this testimony is not as polished as it
18 otherwise would be had we had a little longer to
19 absorb the information. If you'd give us just a
20 moment, please.

21 HEARING OFFICER FAY: Sure.

22 (Pause.)

23 (Off the record.)

24 MR. JOSEPH: Mr. Fay, we did indeed have
25 a failure to communicate and now we will

1 communicate more clearly.

2 HEARING OFFICER FAY: All right, let's
3 go one more time.

4 BY MR. JOSEPH:

5 Q Dr. Fox, will you give us your estimate
6 of PM10 emissions from construction?

7 DR. FOX: Could you repeat that?

8 MR. JOSEPH: Can you give us your
9 estimate of the PM10 emissions from construction,
10 and present it in any way that you're most
11 comfortable.

12 DR. FOX: I'm going to present it in
13 terms of the emissions that were actually modeled
14 by the applicant, and make revisions to that.

15 The emissions, the PM10 construction
16 emissions that were modeled are 42 pounds per day.
17 If you correct those emissions for underestimate
18 of the silt content by the applicant it will
19 result in an increase due just to the silt content
20 alone of 18 pounds per day, changing nothing else
21 but silt content.

22 If you then adjust those emissions for
23 scraper operations using the MRI report and
24 assuming the same control efficiency as the
25 applicant did, and we actually assumed control

1 efficiencies for the scraper operations, the
2 increase due to that change alone would be 59
3 pounds per day.

4 So if you add those up, 42 plus 18 plus
5 59, you get 119 pounds per day. I did not include
6 any adjustment due to the water control
7 efficiency. So the actual emissions would be
8 somewhat higher than 119 pounds per day.

9 MR. JOSEPH: Dr. Fox, in your
10 professional opinion is this a more reasonable
11 estimate of construction emissions than that
12 presented by the applicant and staff?

13 DR. FOX: I definitely think it is.
14 It's not defensible to use an emission factor for
15 a lignite coal mine in central North Dakota to
16 estimate scraper emissions, which is the major
17 source, actually, of construction emissions.

18 MR. JOSEPH: Does your new estimate of
19 onsite PM10 emissions from construction mean that
20 each of the items listed in impacts 5A through 5D
21 would be a significant impact of the project, and
22 more severe than the prior testimony that accepted
23 the applicant's estimates for each of those
24 impacts?

25 DR. FOX: Yes, each of the impacts

1 listed in 5A through 5D would be more significant
2 than previously indicated.

3 MR. JOSEPH: And that's 5A through D in
4 the executive summary of your testimony?

5 DR. FOX: That's correct.

6 MR. JOSEPH: I want to ask you a few
7 questions about mitigation measures for
8 construction emissions. Do you agree that the
9 mitigation measures that the staff has proposed in
10 its conditions of exemption will work and are
11 useful?

12 DR. FOX: I think they will work and
13 they are useful, yes, I support them.

14 MR. JOSEPH: Do those mitigation
15 measures for PM10 or exhaust NOx change your
16 estimate of emissions?

17 DR. FOX: No, they don't, because the
18 emission estimates that were prepared by the
19 applicant, that were relied on by staff and that
20 were prepared by us all assume that those
21 mitigation measures are in place. In other words,
22 they are controlled emissions.

23 MR. JOSEPH: Does the addition of gravel
24 to the highly traveled route change the estimate
25 of emissions?

1 DR. FOX: No, it doesn't because the
2 gravel would be placed after grading.

3 MR. JOSEPH: Does the applicant's
4 estimate of emissions include that reduction, as
5 well?

6 DR. FOX: Yes.

7 MR. JOSEPH: Does having an onsite
8 monitor change your conclusion that emissions were
9 underestimated?

10 DR. FOX: No, the only purpose of an
11 onsite monitor would be to make sure that the
12 mitigation measures, as laid out in staff's
13 testimony, would actually be implemented. And the
14 emission estimates that are presented in staff's
15 testimony already assume that those mitigation
16 measures are fully implemented.

17 MR. JOSEPH: Mr. Fay, that concludes our
18 presentation on construction emissions.

19 HEARING OFFICER FAY: Thank you. Is the
20 panel available for cross-examination?

21 MR. JOSEPH: The panel is definitely
22 available.

23 HEARING OFFICER FAY: Thank you. Mr.
24 Thompson. Mr. Joseph, did you want to move all
25 those exhibits?

1 MR. JOSEPH: I can do it now or do it
2 after.

3 HEARING OFFICER FAY: Why don't we do it
4 now.

5 MR. JOSEPH: Okay. CURE would move into
6 evidence exhibits 16, 25, 26, 27-1A, 27-1B, 27-2A,
7 27-2B, 28, 29, 30 and 31.

8 HEARING OFFICER FAY: Any objection?
9 Hearing none, so moved.

10 MR. THOMPSON: Thank you, Mr. Fay. We
11 will have a few questions on cross, but we will
12 have more substantial material on rebuttal. And
13 we can do that whenever it is convenient for the
14 Committee following the full cross of the panel,
15 following staff, whatever you would like.

16 HEARING OFFICER FAY: Okay.

17 CROSS-EXAMINATION

18 BY MR. THOMPSON:

19 Q Looking at the maps, I think this is
20 exhibit 27, --

21 HEARING OFFICER FAY: All the maps are
22 exhibit 27-dash, and then the figure number on the
23 given map. So it would be 27 --

24 MR. THOMPSON: Dash 1 -- looking --

25 HEARING OFFICER FAY: 1A --

1 MR. THOMPSON: Let's just pick one,
2 figure 1B.

3 BY MR. THOMPSON:

4 Q Do you know when this photograph was
5 taken?

6 MS. SEARS: No, I don't.

7 MR. THOMPSON: And would you locate for
8 me the wastewater treatment facility control
9 building? Is it on here?

10 MS. SEARS: I'm not sure what that would
11 be.

12 MR. THOMPSON: Okay. Are you aware that
13 this site was graded some number of years ago?

14 MS. SEARS: No, I wasn't.

15 MR. THOMPSON: So you don't know whether
16 or not that would show up on this map or not?

17 MS. SEARS: No, I don't. I don't know
18 the year of this map. This was the most recent
19 one that was available from the data source that I
20 indicated in our testimony.

21 MR. THOMPSON: Turning to figure 1A, the
22 blue line encompasses what appears to be a
23 structure. Do you know what that is?

24 MS. SEARS: No, I don't.

25 MR. THOMPSON: Figure 2B there's a

1 notation at the bottom after the isopleth that
2 says 4RB1.DXF. Would you tell me what that is?

3 MS. SEARS: 4RB1.DXF, yes, that's the
4 file name of the 1 mcg/cubic meter isopleth that I
5 overlaid onto the aerial photo and this map. So,
6 the actual, that line, that region, that 1
7 mcg/cubic meter redline has a name; it's a DXF
8 file. It's a drawing exchange file from AutoCad.
9 And so the GIS is just telling me, and I'm
10 reminding myself what file it was that I imported
11 and overlaid onto the map.

12 MR. THOMPSON: So this file does not
13 carry assumptions about project construction
14 emissions, is that right?

15 MS. SEARS: All that DXF file is the
16 line, itself.

17 MR. THOMPSON: Okay. Could you tell me
18 the date of the inputting of the data that led to
19 this file?

20 MS. SEARS: The date I performed the
21 modeling?

22 MR. THOMPSON: Well, I was actually
23 asking for the date you inputted the information,
24 but if you don't have that the date of the
25 modeling, I guess, would be all right.

1 MS. SEARS: It was the few days prior
2 to -- it was last week, so sometime during last
3 week when I did the modeling.

4 MR. THOMPSON: And can you testify that
5 the material was current as of the date you
6 inputted it?

7 MR. JOSEPH: Mr. Fay, I wonder if we
8 could get the question clarified. I'm not sure
9 what material Mr. Thompson is referring to in his
10 question.

11 MR. THOMPSON: Well, I'm operating under
12 the assumption that there were certain assumptions
13 that she used to input to get her little red line
14 on here. And I was just asking what the date of
15 those were.

16 MR. JOSEPH: Well, perhaps you should
17 ask that question first.

18 MR. THOMPSON: Okay.

19 BY MR. THOMPSON:

20 Q Put a question mark at the end of that.

21 MS. SEARS: I'm sorry, could you repeat
22 the question, there was a lot of cross-talk.

23 MR. THOMPSON: Am I correct that --

24 HEARING OFFICER FAY: Excuse me, Mr.
25 Thompson, if I can interrupt. Do you know what

1 date the eight-hour standard was clarified?

2 MR. THOMPSON: We had a number of files
3 that had different data in it. We don't know
4 which one CURE used. We have a little problem
5 trying to figure that out, whether or not the data
6 that they used was old or fresh. And that was the
7 basis of my question, whether or not they had a
8 date of when this data was current.

9 HEARING OFFICER FAY: Because I have the
10 impression --

11 MR. JOSEPH: Is the question which
12 version of the applicant's modeling was used? Is
13 that the question?

14 HEARING OFFICER FAY: Well, it has been
15 continually revised, and I understand a late
16 revision was the applicant's statement that they
17 would only do construction on an eight-hour
18 period.

19 And this, I'm looking at figure 27-2B,
20 reflects the eight-hour day onsite construction.
21 So was that using new information that you didn't
22 have before?

23 MS. SEARS: No, it's the same as, for
24 example, the modeling that was submitted by Karl
25 Lany, and also used by Will Walters. There was

1 also some direct testimony from, I believe he name
2 is Dan McCann, who said that they might be using
3 an eight-hour day. And during the hours of say
4 7:00 to 4:00, essentially a nine-hour period.

5 And I used that time period to limit the
6 hours of emissions in my modeling. And that's how
7 I prepared figure 2B. So it was after I saw Dan
8 McCann's testimony, so it would be sometime last
9 week, I believe. Within the last week or ten days
10 or so.

11 But, again, it's the same modeling
12 input; it's the same emission rates that have been
13 used all along. It's just limiting it to the
14 hours of the day that Dan McCann specified in that
15 one page of testimony that he provided.

16 HEARING OFFICER FAY: Go ahead, Mr.
17 Thompson.

18 BY MR. THOMPSON:

19 Q Would you tell me what the file name was
20 that you used?

21 MS. SEARS: The file name for my -- for
22 what?

23 MR. THOMPSON: You used some of our
24 computer run, some of our files as a basis for
25 your calculations for your run?

1 MS. SEARS: Right.

2 MR. THOMPSON: And I was asking what the
3 name of our run was that you used, if you know.

4 MS. SEARS: I think it was run 4B.
5 There was two run 4's for construction that the
6 applicant did. One was for 24 hour and one was
7 for annual. Those are the ones that I used.

8 MR. THOMPSON: That finishes my cross.
9 We have rebuttal.

10 HEARING OFFICER FAY: Ms. DeCarlo.

11 MS. DeCARLO: Thank you. Just a few
12 questions.

13 CROSS-EXAMINATION

14 BY MS. DeCARLO:

15 Q One question for Ms. Sears. You
16 referenced the dispersion coefficient. Do you
17 know what South Coast requires, if they require
18 urban or rural?

19 MS. SEARS: Yes, I do.

20 MS. DeCARLO: And what would they
21 require?

22 MS. SEARS: I spoke with South Coast
23 AQMD Staff during this project to see if the
24 recommendation for urban was -- whether or not
25 that was an absolute requirement. And the

1 recommendation that I got back from staff was that
2 we need to use the USEPA methods that are
3 specified in the guideline air quality models.

4 And basically there are two approaches.
5 One is population density and the other one is
6 land use classification. And a three kilometer
7 rate is circled around the site.

8 I didn't do either of those analyses
9 because I just went ahead and used the urban
10 dispersion modeling that the applicant used. But
11 we could go through and see whether rural would
12 apply. It might, it might not. But if we did do
13 rural, it would definitely be a higher impact than
14 what we modeled as urban.

15 MS. DeCARLO: Okay, thanks. Dr. Fox,
16 the rest are for you.

17 Are there any receptors, sensitive or
18 otherwise, located on the fenceline of the
19 proposed project?

20 DR. FOX: The fenceline is a receptor.
21 Ambient air quality standards apply everywhere
22 outside of the fenced boundary of the project.

23 MS. DeCARLO: Are there any people
24 located on the fenceline?

25 DR. FOX: People could be located on the

1 fenceline. There's nothing to prevent anyone from
2 walking up to the fenceline and observing
3 construction.

4 MS. DeCARLO: Are people located on the
5 fenceline for a period of 24 hours?

6 DR. FOX: Probably not. But the impact
7 here, as you heard Ms. Sears testify to, assumes
8 that most of those 24 hours have zero emissions.
9 And the actual impact occurs during a very short
10 period of time.

11 So if you had a receptor, a person on
12 the fenceline during those hours when the
13 significant impact actually occurs, you would have
14 a receptor there.

15 MS. DeCARLO: But you have no knowledge
16 of any person residing on the fenceline for 24
17 hours?

18 DR. FOX: Well, there's nothing to
19 prevent public access, and that is the test when
20 applying ambient air quality standards.

21 MS. DeCARLO: Are you familiar with the
22 Salton Sea project recently approved by the
23 Commission?

24 DR. FOX: Yes.

25 MS. DeCARLO: Isn't it true that the

1 analysis contained in that project showed a
2 potential for the exceedance of the hydrogen
3 sulfide standard?

4 DR. FOX: I don't really recall.

5 MS. DeCARLO: Did you provide testimony
6 in that case?

7 DR. FOX: No.

8 MS. DeCARLO: Did you provide written
9 comments on that case?

10 DR. FOX: I worked on hydrogen sulfide
11 comments. I'm not aware whether they were
12 submitted or not. I believe they were not.

13 MS. DeCARLO: And did the Commission
14 approve that project to your knowledge?

15 DR. FOX: I don't know what happened to
16 Salton Sea.

17 MS. DeCARLO: Did CURE recommend
18 approval of that project?

19 DR. FOX: I don't know.

20 MS. DeCARLO: Let's turn to staff's
21 supplemental testimony, page 4-26, if you could.

22 DR. FOX: Okay.

23 MS. DeCARLO: Now at the very top of
24 that page, the top columns, the top row, you
25 testified that you weren't clear as to what those

1 numbers really referred to.

2 Can you please read the very left-hand
3 column of the first row of numbers.

4 DR. FOX: It says maximum modeled
5 residential construction PM10 24-hour impacts.

6 MS. DeCARLO: Thank you. Will the
7 project's NOx emissions, as estimated in the
8 model, cause exceedance of the one-hour NO2
9 standard?

10 DR. FOX: Construction emissions?

11 MR. JOSEPH: Objection, that's outside
12 the scope of her direct. We have provided no
13 testimony at all about the NO2 standard
14 whatsoever.

15 MS. DeCARLO: You did provide comments
16 regarding the significance of NOx emissions.

17 DR. FOX: Yes.

18 MS. DeCARLO: Your answer was yes to
19 whether there was an exceedance? Or --

20 DR. FOX: Yes, I provided testimony on
21 the NOx emissions significance, that's right.

22 MS. DeCARLO: Can I proceed with the
23 question that --

24 HEARING OFFICER FAY: Yeah, your
25 question was about NO2. Did you mean NOx?

1 MS. DeCARLO: NOx, one-hour NOx
2 standard.

3 MR. JOSEPH: Mr. Fay, there's a separate
4 ambient air quality standard for NO2, and we have
5 not suggested in any way that that standard will
6 be violated. The testimony --

7 HEARING OFFICER FAY: Okay, why don't
8 you repeat --

9 MR. JOSEPH: -- was about NOx emissions
10 as a precursor to ozone, and entirely separate
11 standard.

12 MS. DeCARLO: That's fine, it's not
13 important.

14 BY MS. DeCARLO:

15 Q Now, if you could please turn to exhibit
16 28, tab H; that's the exhibits attached to your
17 testimony.

18 DR. FOX: Okay.

19 MS. DeCARLO: Now, this is a portion of
20 the South Coast CEQA handbook, is it not?

21 DR. FOX: Yes.

22 MS. DeCARLO: Can you please turn to
23 page 6-2?

24 DR. FOX: Okay.

25 MS. DeCARLO: And can you please read

1 the last sentence from the first paragraph of that
2 page?

3 DR. FOX: "However the final
4 determination of whether or not a project is
5 significant is within the purview of the lead
6 agency pursuant to section 15064(b) of the CEQA
7 guidelines."

8 MS. DeCARLO: And who is the lead agency
9 in this case?

10 DR. FOX: The CEC.

11 MS. DeCARLO: Can you please turn to
12 page 11-16 of that same tab H.

13 DR. FOX: Okay.

14 MS. DeCARLO: Now, you previously
15 testified regarding the percentage to be used in
16 terms of efficiency of the mitigation measure
17 watering. Can you please read the last three
18 sentences at the very bottom of that page?

19 DR. FOX: "When efficiency is provided
20 at a range, if project-specific efficiency is
21 unknown, use the lower number given. If project-
22 specific efficiency is utilized, provide
23 supporting analysis and documentation."

24 MS. DeCARLO: Okay, thank you. Now, can
25 you please turn to exhibit 31, the study regarding

1 the scraper emissions.

2 DR. FOX: Yes, okay.

3 MS. DeCARLO: What were the sources used
4 for the data for this report?

5 DR. FOX: Excuse me? Could you repeat
6 that?

7 MS. DeCARLO: What sources were used to
8 obtain the data for this report?

9 DR. FOX: You mean how did MRI come up
10 with the emission factors?

11 MS. DeCARLO: Yeah, what were the
12 locations?

13 DR. FOX: There were a number of
14 locations which are indicated in the last page of
15 the exhibit, table 2, survey construction sites.

16 MS. DeCARLO: And I see you have circled
17 here Las Vegas and San Joaquin Valley. Are those
18 two sites, were those two used for the scraper
19 location?

20 DR. FOX: Yes.

21 MS. DeCARLO: What type of soils occur
22 on these sites?

23 DR. FOX: What type of soil?

24 MS. DeCARLO: Yeah, do you know the
25 percentage of silt content that occurred on these

1 sites?

2 DR. FOX: You can't tell from this
3 exhibit, but I believe -- well, I'd have to look
4 at the full report, which I have with me. I could
5 look.

6 MS. DeCARLO: So you don't know if those
7 sites contain a comparable silt content as
8 compared to this proposed project site?

9 DR. FOX: I can get the report and look,
10 but my recollection is the silt content was quite
11 low in most of these sites.

12 MS. DeCARLO: But you don't have the
13 numbers?

14 DR. FOX: I don't have the numbers but I
15 can get them. They're in this room.

16 MS. DeCARLO: And how are these sites
17 more relevant than this site in North Dakota
18 identified in the other document you mentioned?

19 DR. FOX: Well, the North Dakota site is
20 based on single study at a coal mine, lignite is
21 coal. These analyses here are based on eight
22 separate sites in which fairly detailed, you know,
23 field work and calculations were done to develop
24 emission factors specific to construction.

25 The kind of operations that take place

1 at a mine are distinguishable from the types of
2 operations that take place at a construction site.

3 MS. DeCARLO: Isn't it true that the
4 report done on the mine was based on topsoil and
5 not coal?

6 DR. FOX: I believe it was based on
7 topsoil, and I believe it was loamy sand -- let me
8 look at it.

9 What's the exhibit number for AP-46 so I
10 can refer to it?

11 MS. DeCARLO: 29, I believe that was
12 exhibit 29.

13 DR. FOX: 29? Exhibit 29, page 11.9-12,
14 mine item four, there's a column that says surface
15 soil type -- index, loamy, loamy to sandy.

16 MS. DeCARLO: But you do agree it was
17 based on topsoil and not coal?

18 DR. FOX: I don't necessarily agree with
19 that, because they're listing a lot of descriptive
20 information about the site, the vegetative cover,
21 the type of terrain, the type of surface soil, the
22 mean wind speed, the mean annual precipitation. I
23 believe they're just describing the setting.

24 I don't know, as I stand here, whether
25 or not the calculation was based on lignite,

1 itself, or on the topsoil.

2 MS. DeCARLO: Can you please turn to
3 page 11.9-11 in that document.

4 DR. FOX: Okay.

5 MS. DeCARLO: And table 11.9-4, can you
6 please read the second row of that first column?

7 DR. FOX: Yes. It says scraper
8 unloading batch drop operations were based on
9 topsoil.

10 MS. DeCARLO: Thank you. Now you
11 mentioned you used this MRI report in the Unocal
12 proceeding, I believe it was?

13 DR. FOX: For work I did for Unocal,
14 yes.

15 MS. DeCARLO: And what was the subject
16 of that work, what proceeding did that involve?

17 DR. FOX: I wouldn't call it a
18 proceeding. It was used in estimating emissions
19 from construction and other earthmoving activities
20 at Avila Beach in Guadalupe on the central coast.

21 MS. DeCARLO: Okay, I believe that's the
22 extent of our questions. Thank you.

23 HEARING OFFICER FAY: Okay.

24 COMMISSIONER GEESMAN: You had, after
25 walking us through the calculation of 119 pounds

1 per day, indicated that that number would not be
2 reduced by the application of gravel because the
3 gravel would come in after grading had been
4 performed. Am I correctly summarizing what you
5 said on that subject?

6 DR. FOX: Yes. Actually there's gravel
7 in two parts of this project. The first, I
8 believe, is in the material that I've seen
9 submitted by the applicant. The project will
10 actually be built on a layer of gravel. They're
11 going to import gravel and build it for
12 foundations on the gravel.

13 The testimony that I just gave about
14 gravel is one of the mitigation measures that the
15 staff added in its supplemental testimony, was to
16 add gravel to the onsite haul roads during
17 construction.

18 COMMISSIONER GEESMAN: And I believe you
19 said that that would not reduce your 119 pounds
20 per day calculation?

21 DR. FOX: That's right, because if you
22 read the mitigation measure that the staff added,
23 it says it would be added after grading.

24 COMMISSIONER GEESMAN: So the 119 pounds
25 per day number would apply during the grading

1 period primarily?

2 DR. FOX: Yes, it's on the maximum day.

3 COMMISSIONER GEESMAN: And do you have a
4 sense as to how long that level of emissions would
5 persist, how many days?

6 DR. FOX: No, I don't. The applicant
7 hasn't provided a detailed construction schedule
8 for grading plans, so there's no way for me to
9 answer that question.

10 COMMISSIONER GEESMAN: Were you in the
11 hearing room this morning when the letter from the
12 two owners of the Hidden Valley Kennels was
13 introduced?

14 DR. FOX: Yes.

15 COMMISSIONER GEESMAN: Indicating their
16 willingness to vacate their premises for
17 approximately four hours a day during the three-
18 week period?

19 DR. FOX: I would like to look at the
20 letter. I think that's more a question to Ms.
21 Sears.

22 COMMISSIONER GEESMAN: It's in the first
23 paragraph of the letter.

24 DR. FOX: Okay, I've read it.

25 COMMISSIONER GEESMAN: Would it be

1 reasonable for me to infer then that peak
2 emissions rate would persist for about three
3 weeks?

4 DR. FOX: I couldn't draw the conclusion
5 that the peak emission rate would occur for three
6 weeks based on this letter. I don't know what the
7 three weeks is based on.

8 COMMISSIONER GEESMAN: Thank you.

9 HEARING OFFICER FAY: Dr. Fox, did you,
10 after making adjustments for the silt content,
11 come down to a figure of 18 percent? Am I
12 recalling that correctly?

13 DR. FOX: Yes. My estimate of silt
14 content for the soil fill material would come down
15 from 28 percent to 18 percent.

16 HEARING OFFICER FAY: And, can you help
17 us understand the difference between your estimate
18 and the applicant's 13 and something percent silt
19 content?

20 DR. FOX: That's a very complicated
21 question. The second round of construction
22 emission estimates that the applicant did used
23 three separate silt content values.

24 For wind erosion, water trucks and dump
25 trucks moving around onsite they assumed the silt

1 content of 13.2 percent.

2 For service trucks, delivery trucks and
3 crew visitor trucks, again onsite, they assumed a
4 silt content of 10 percent.

5 And for the scraper operations they
6 assumed a silt content of 7.2 percent.

7 HEARING OFFICER FAY: And you disagree
8 with that?

9 DR. FOX: Yes. The wind erosion, the
10 water trucks, the dump trucks, the service trucks,
11 the delivery trucks and the crew and visitor
12 vehicles all travel on the surface. And for
13 purposes of estimating silt content on the
14 surface, in my opinion 18 percent is more
15 appropriate.

16 The numbers that the applicant relied on
17 don't consider the upper foot of fill soil.
18 You've heard a lot of testimony in this case about
19 sieve analyses. The original geotechnical reports
20 included some sieve analyses which turned out to
21 be sieve analyses of drill cuttings from bedrock.

22 The applicant then went out and
23 collected some of additional samples. All of them
24 but one was again from bedrock material. And --
25 well, let me get the applicant's testimony so I

1 don't mischaracterize it.

2 The staff has a pretty good summary of
3 the subsequent sampling that the applicant did.
4 It's in staff's supplemental geology testimony by
5 Dal Hunter. And it's on the second page of Mr.
6 Hunter's testimony in tables 1 and 2.

7 HEARING OFFICER FAY: So is your
8 disagreement based on the fact that they averaged
9 these different levels?

10 DR. FOX: No, it's not. It's actually a
11 long and complex explanation, so I'm going to walk
12 you through it.

13 Table 1 in Mr. Hunter's testimony
14 summarizes the original four sieve analyses that
15 were available. Those are what's labeled
16 specimens B2, B10, B11 and B26. And those are the
17 samples that originate from drill cuttings from
18 the augers that were used to drill bore holes.

19 The applicant then, when the silt
20 content issue arose in conjunction with emission
21 estimates, the applicant collected some additional
22 samples. And they are presented in table 2.

23 And they collected four additional
24 samples for sieve analyses from test pits. And
25 what I want to call your attention to is the

1 column labeled depth. All of those samples were
2 collected at a depth of one to three feet. And
3 three of those four samples were collected in
4 bedrock. The only one that wasn't collected in
5 bedrock, which was collected in soil, is 15.5
6 percent.

7 None of the four new samples were
8 collected in the upper one foot of soil. So we
9 have no sieve analyses based on this, of the upper
10 one foot of soil.

11 Yesterday Mr. Hunter presented for the
12 first time four additional samples that were
13 collected adjacent to the previous sampling sites
14 to calibrate this visual observation issue. All
15 four of those samples were collected at a depth of
16 1.8 feet and deeper. Again, no samples of the
17 upper foot.

18 For purposes of estimating construction
19 emissions from sources that move along the surface
20 you have to know what the surface silt content is.
21 And there are no sieve analyses of the surface
22 silt content.

23 So, I previously read off to you the
24 items that involve the emissions of fugitive dust
25 from surfaces. They were wind erosion, water

1 trucks, dump trucks, service trucks, delivery
2 trucks, and crew visitor trucks.

3 In my opinion it's appropriate to use a
4 silt content for those operations that generate
5 fugitive dust from operating on the surface. It's
6 appropriate to use a surface silt content. There
7 are no sieve analyses that I have seen anywhere in
8 this record for silt content of the top one foot
9 based on sieve analyses. The only data that's
10 available are visual observations on the boring
11 logs, which is why we used them.

12 Based on the new data that Mr. Johnston
13 put into the record yesterday, the four new test
14 pits, his visual observations were obviously based
15 on that data. High by about 10 percent if you
16 assume that his over-estimation is the same in the
17 top foot as it is at 1.8 feet and below where he
18 did his testing.

19 Therefore, for purposes of revising the
20 emissions for our estimates, we used 18 percent
21 instead of the 13.2 percent and the 10 percent
22 used by the applicant.

23 And then for scraper operations, which
24 is, by the way, the major source of PM10, the
25 applicant used a number of 7.2, which is the

1 average for the material below one foot based on
2 their sieve analyses.

3 That is not really reasonable for a
4 scraper. What a scraper does is it digs out the
5 dirt, not just from the surface, but from a depth.
6 And what you're dealing with when you're dealing
7 with a scraper is some sort of average of what is
8 in the surface soil that the scraper digs into, as
9 well as what is in the subsurface soils in the
10 bedrock.

11 The number that they have used is just
12 for the bedrock. So what I did, for purposes of
13 estimating scraper emissions, was I used a
14 weighted average of soil fill and bedrock, using
15 the same procedure that's outlined in my
16 testimony. Assuming 18 percent for the soil fill
17 and 6.7 percent for the bedrock, based on the
18 applicant's analyses. That weighted average is
19 12.8 percent.

20 So, I basically re-ran the applicant's
21 spreadsheets making those substitutions, 18
22 percent for activities that affect the surface,
23 and 12.8 percent for the scrapers because they dig
24 down and they're moving more than just bedrock.
25 They're moving a column of soil.

1 Sorry that answer was so long, but it
2 was a complicated question.

3 HEARING OFFICER FAY: Thank you. And,
4 Mr. Joseph, do you have any redirect?

5 MR. JOSEPH: If we could have just a
6 moment I think we may have one or two questions.

7 HEARING OFFICER FAY: Okay.

8 (Pause.)

9 HEARING OFFICER FAY: Okay. Mr. Joseph,
10 your redirect.

11 MR. JOSEPH: Are we going to wait for
12 our Commissioner?

13 HEARING OFFICER FAY: Well, we have one
14 Commissioner here.

15 MR. JOSEPH: Okay.

16 HEARING OFFICER FAY: Why don't we go
17 ahead.

18 MR. JOSEPH: Okay.

19 REDIRECT EXAMINATION

20 BY MR. JOSEPH:

21 Q Dr. Fox, have you now looked at the silt
22 content that was used in the MRI study to produce
23 the emission factor you used?

24 DR. FOX: Yes, I have.

25 MR. JOSEPH: What is the average silt

1 content of the samples that form the basis of the
2 emission factor that you used?

3 DR. FOX: 6.73 percent.

4 MR. JOSEPH: You didn't listen carefully
5 to my question.

6 DR. FOX: Oh.

7 MR. JOSEPH: What is the average silt
8 content of the samples that were used to form the
9 basis of your emission calculation?

10 DR. FOX: 14.5 percent.

11 MR. JOSEPH: And how does that compare
12 to the silt content of the site?

13 DR. FOX: It's consistent with it. The
14 surface soil, based on my previous testimony, is
15 18 percent; and the weighted average is 12.8
16 percent.

17 MR. JOSEPH: Thank you. Sorry I jumped
18 on you. For the benefit of the Committee Dr. Fox
19 has a high frequency hearing loss and I'm
20 sometimes accused of not speaking loudly enough
21 for her to hear.

22 HEARING OFFICER FAY: Is that all?

23 MR. JOSEPH: Yes, that's all.

24 HEARING OFFICER FAY: Okay. Any
25 recross, Mr. Thompson?

1 MR. THOMPSON: No.

2 HEARING OFFICER FAY: Ms. DeCarlo?

3 MS. DeCARLO: No.

4 HEARING OFFICER FAY: Okay. Thank you.

5 I want to thank the panel for their testimony.

6 The staff has asked if they could bring on the
7 representative from the Air District who has a
8 time constraint before we get into applicant's
9 rebuttal testimony on construction impacts air
10 quality.

11 So, we'd like to do that now at this
12 time. And if the witness from the Air District
13 would come forward.

14 MR. JOSEPH: Mr. Fay, I have to ask what
15 the basis for this is. We have no either prefiled
16 testimony, or as we would in a normal AFC, we have
17 no determination of compliance.

18 HEARING OFFICER FAY: I'm aware of that.
19 Ms. DeCarlo, --

20 MS. DeCARLO: It's rebuttal testimony,
21 strictly on a limited issue with regard to Dr.
22 Fox's assertion that rule 1303 applies to the
23 construction emissions analysis.

24 HEARING OFFICER FAY: Okay. Sounds
25 relevant.

1 MS. DeCARLO: Staff would like to call
2 Mohsen Nazemi from the Air District.

3 HEARING OFFICER FAY: Okay. Sir, are
4 you willing to be sworn as a witness?

5 MR. NAZEMI: Yes, I am.

6 HEARING OFFICER FAY: Okay. Please
7 swear the witness.

8 Whereupon,

9 MOHSEN NAZEMI
10 was called as a witness herein, and after first
11 having been duly sworn, was examined and testified
12 as follows:

13 HEARING OFFICER FAY: Thank you.

14 DIRECT EXAMINATION

15 BY MS. DeCARLO:

16 Q Thank you, Mr. Nazemi. Can you please
17 state your title?

18 A My title is Assistant Deputy Executive
19 Officer, South Coast Air Quality Management
20 District. And I'm responsible for Office of
21 Engineering and Compliance, which is permitting
22 and enforcement.

23 Q And were you present when Dr. Fox
24 testified with regard to rule 1303?

25 A Yes.

1 Q Do you recommend the use of the numbers
2 contained in rule 1303 for construction impact
3 analysis under CEQA?

4 A Under our requirements we use rule 1303
5 tables that was referenced in the earlier
6 testimony as part of assessing the localized
7 impacts from operational emissions from projects.
8 But not from construction emissions.

9 Q Thank you.

10 MS. DeCARLO: The witness is available
11 for cross-examination or questions of the
12 Committee.

13 HEARING OFFICER FAY: Mr. Thompson.
14 Questions, Mr. Thompson?

15 MR. THOMPSON: No.

16 HEARING OFFICER FAY: Mr. Joseph.

17 MR. JOSEPH: One moment, please.

18 CROSS-EXAMINATION

19 BY MR. JOSEPH:

20 Q Mr. Nazemi, can you tell me what the 1
21 mcg/cubic meter threshold is based on? How was
22 the number derived?

23 A No, I can't tell you that; that's not my
24 area of expertise.

25 Q If I have two situations each of which

1 produces the same impact on ambient air quality,
2 and one derives from the operation of a project
3 and the other derives from the construction of a
4 project, say we're using 24-hour PM10, is there a
5 difference in the ambient air quality depending on
6 what the cause of those emissions is?

7 A From a hypothetical standpoint, no.
8 However, the reason that we don't recommend using
9 these tables in rule 1303 is because of the
10 temporary nature of construction activities
11 compared to operational activities, they're more
12 of a permanent nature.

13 Q Do you agree if we're assessing impacts
14 over a 24-hour period the source or nature of the
15 emissions is not necessarily different depending
16 on what the cause is, is that right?

17 A On any 24-hour basis that's correct.

18 MR. JOSEPH: That's all the questions I
19 have, thank you.

20 HEARING OFFICER FAY: Okay.

21 COMMISSIONER GEESMAN: Mohsen, I want
22 to thank you for being here. We've enjoyed a long
23 and beneficial relationship with the South Coast
24 over the years.

25 There was quite a bit of testimony as to

1 the South Coast District's significant thresholds.
2 Are those binding on the Energy Commission in its
3 siting process?

4 MR. NAZEMI: Let me answer in a
5 different way. First of all, thanks for your
6 compliments, but secondly, as far as the Energy
7 Commission's licensing process of AFC, or in this
8 case the SPPE, utilizing a CEQA-equivalent
9 approach, I think that the lead agency has
10 discretion to determine their own significant
11 thresholds as cited in our code from our CEQA
12 handbook.

13 When it comes to a determination of
14 compliance on a specific permit I think we
15 typically recommend what significant thresholds,
16 for example, we use in rule 1303 as far as
17 operational impacts to CEC.

18 And thus far, I think, from my
19 experience, 20-some years at the District, CEC has
20 in almost all cases relied on those numbers. You
21 can go beyond those but you have not questioned
22 those in the past.

23 In fact, the main reason we were here
24 today was to address any questions that may come
25 up during testimony on the operational impacts.

1 But unfortunately it looks like we're not going to
2 be here for that part of the testimony.

3 COMMISSIONER GEESMAN: Thank you very
4 much.

5 HEARING OFFICER FAY: Thank you for
6 staying as long as you were able to. We
7 appreciate your time.

8 MR. NAZEMI: Thanks.

9 HEARING OFFICER FAY: Okay, Mr.
10 Thompson, are you ready to go forward on your
11 rebuttal?

12 MR. THOMPSON: Yeah, and what I'd like
13 to do is do it in a couple parts. I think that
14 the record would be helped by a panel of Mr. Lany
15 and Mr. Johnston on the issue of silt content of
16 the soil and how it was used, if that's
17 acceptable.

18 HEARING OFFICER FAY: And this is all
19 regarding construction impacts?

20 MR. THOMPSON: Absolutely.

21 HEARING OFFICER FAY: Good, okay.

22 MR. THOMPSON: Both Mr. Johnston and Mr.
23 Lany have been previously sworn.
24 Whereupon,

25 KARL LANY and JEFFREY JOHNSTON

1 were recalled as witnesses herein, and having been
2 previously duly sworn, were examined and testified
3 further as follows:

4 DIRECT EXAMINATION

5 BY MR. THOMPSON:

6 Q Mr. Johnston, let me ask you a few
7 questions, if I may, on the silt content of the
8 soil and the recent tests that you did. Those are
9 the tests last week.

10 Were the field tests conducted by LOR,
11 your company, under your direction?

12 MR. JOHNSTON: Yes.

13 MR. THOMPSON: And were the lab tests
14 that were done with the samples done by you or
15 under your direction by LOR?

16 MR. JOHNSTON: They were conducted by
17 our firm and our laboratory at Riverside here,
18 yes.

19 MR. THOMPSON: And where in the site
20 were those samples taken?

21 MR. JOHNSTON: The most recent ones,
22 last week?

23 MR. THOMPSON: Yes.

24 MR. JOHNSTON: They were taken, I don't
25 know if this means anything to anybody, but they

1 were taken at the sites of our original test pits,
2 TP-5, TP-6, TP-7, TP-8. Generally that's over in
3 the southwest portion of the site where the
4 construction's going on by the one little building
5 there, the power grid, and on one of the generator
6 sites in the areas where we felt, based on our
7 logs, was the maximum amount of this nonbedrock
8 materials, topsoils and fills.

9 MR. THOMPSON: So you took your logs and
10 from that determined where you expected to find
11 the maximum amount of silt and took samples from
12 that general area, is that a correct statement?

13 MR. JOHNSTON: Yes. There had been some
14 comment by CURE that there wasn't any good sieve
15 data on these upper materials, which is not
16 actually correct. But, however, to, you know, to
17 lay that all to rest we went into those areas
18 where the maximum amounts were and sampled at
19 various depths in there.

20 MR. THOMPSON: And you heard Dr. Fox
21 testify a number of times that there were no silt
22 samples in the upper foot of the soil. Do you
23 have any comment to make on that?

24 MR. JOHNSTON: Yeah. Yes, I do,
25 actually. That was kind of an error. Actually,

1 if I could bring up another point, too, a pitfall
2 that CURE may have fallen into.

3 We always put these things in our
4 reports, and it's on page 30 of our January 21,
5 2004 report that, you know, we don't recommend you
6 extrapolate any of the data from this report into
7 other -- for other uses, other than what we
8 specifically stated.

9 That's specifically to keep us out of
10 these problems like this. And we say unless you
11 contact us first.

12 Mr. Lany, Karl Lany, did call us and
13 contacted us early on and explained what he was
14 doing. And talked with us about which values
15 would be suitable to use.

16 We did not receive any calls from Dr.
17 Fox -- I forgot the other person's name already --

18 MR. THOMPSON: Dr. Pless?

19 MR. JOHNSTON: Any people from CURE, we
20 were never contacted by anybody from CURE to ask
21 if it was, in our opinion, us being the ones that
22 had collected these, if we thought it was suitable
23 to use the values that they wanted to do.

24 So, you doing that, they didn't note
25 that the auger borings that she referred to in the

1 appendix of our report were actually collected for
2 what's called an R-value sample, which is a
3 surface -- goes from the surface, because that's
4 where you put the road, it's a parking lot, and it
5 goes from the surface down to where we figure the
6 material's going to be used for that road. It's
7 the upper three feet.

8 It starts out, the person actually
9 collects at zero, starts putting the soil in as
10 it's coming off the auger, down to three feet.
11 And that's illustrated on our enclosure C-1 where
12 it says B0-2, and it says specimen identification
13 taken at zero to three feet. That's a surface
14 sample.

15 And it says B-10 was taken at zero, this
16 is of our original study, zero to three feet. And
17 then B-11 was taken at zero, zero being the
18 surface, to three feet. And then B-26 taken at
19 zero to three feet. That's the original report.

20 There was some comment later on about,
21 you know, when Mr. Lany was asking us about the
22 use of these and we decided to look in a little
23 more detail at different depth levels. And
24 therefore we looked at different depth levels, and
25 that is the test of the second phase where they

1 range from one to three and three to six, and one
2 to three and three to six, and one to three,
3 again.

4 The final ones that we just took were
5 all taken as a composite of the upper surface
6 materials compositing that entire fill layer, or
7 fill and topsoils. Every single one of them was a
8 composite from the zero, like TP-5 was zero to
9 1.8; TP-6 was zero, zero being the surface, to
10 5.8. And TP-7 was zero to 2.2; and TP-8 was zero
11 to 2.8.

12 So I believe Dr. Fox had stated
13 something about only one or two were taken out of
14 the surface of all these. But in actuality, one,
15 two, three, four, five, six, seven, eight of the
16 tests were actually taken at the surface.

17 MR. THOMPSON: And now that you have
18 done three sets of tests, my understanding is that
19 some were with augers, some trench, the latest
20 ones being more surface testing, would you -- do
21 you have any opinion on the silt content numbers
22 that Mr. Lany used?

23 MR. JOHNSTON: Yeah. His values that he
24 used appear to stay right in with the actual -- or
25 I'm sorry, with the actual measured values. I

1 hate to hone in the fact that I was consistently
2 wrong, but I have to admit to it.

3 But on my visual analysis I was
4 consistently high, I think ten was my low, but I
5 believe Dal yesterday defended me by bringing up
6 again that's why these things are in these reports
7 about please don't use this data for other stuff,
8 because it may not be intended for that.

9 But we do not really pay a whole lot of
10 attention to the silt estimates when we're looking
11 at the rippability of the bedrock. It's just kind
12 of quickly noted, and moved on.

13 But in those estimates I have one where
14 I was off 17 percent, 8 percent, 12 percent and 10
15 percent. If that was a staff geologist of mine I
16 would take him aside and say your 10 percent, 8
17 percent are acceptable; 12 and 17, watch it next
18 time.

19 But again, we run the sieves to see. So
20 I'm still confused as to why they insist on taking
21 those, dividing them up, using them to the second
22 decimal as an accurate value and saying he's 10
23 percent high and dropping down. When we actually
24 have good exact data which states those upper
25 fills are about 12.2 percent silt content. And

1 that is measured data.

2 MR. THOMPSON: And am I correct that the
3 12.2 percent were taken in part or all from the
4 area where you expected to find the greatest
5 fines?

6 MR. JOHNSTON: Yes.

7 MR. THOMPSON: Mr. Lany, you just heard
8 the testimony of Mr. Johnston?

9 MR. LANY: Yes.

10 MR. THOMPSON: Do you have any revisions
11 that you would like to make to your assumed silt
12 content numbers of, correct me if I'm wrong, 13.2,
13 10.0 and 7.2?

14 MR. LANY: No, but I would like to maybe
15 clarify how the silt values really come into play
16 when you look at the emissions, and really remind
17 the Commission of how --

18 MR. JOSEPH: Excuse me, Mr. Lany, could
19 you just get closer to the microphone?

20 MR. LANY: Oh, sure. And remind the
21 Commission of exactly what we're talking about
22 when we talk about the construction operations.

23 Again, we were focusing a lot on scraper
24 operation and that front-end earthmoving during
25 the primarily 15 days of the construction project

1 is where our peak days are.

2 There has been a lot of discussion about
3 silt value at surface versus silt value at one
4 foot, six inches, at the end of topsoil, at the
5 end of fill, at bedrock. And, again, with a lot
6 of emphasis on silt at the surface.

7 And I think if we pay attention to how
8 the scraping operations occur, if you take a look
9 at the typical operation like this you will have
10 several pieces of equipment operating in tandem.
11 The first is a water truck; following that water
12 truck are the scrapers. And they almost operate
13 in a -- fashion, the water truck goes down, lays
14 down water; the scraper comes up, scrapes dirt and
15 takes that dirt and puts it into a different
16 section. Constantly a rotating cycle, water-
17 earthmoving, water-earthmoving.

18 We are not talking about two
19 applications of water per day; we're talking what
20 is really a consistent application of water
21 through the operation. Following, I think, a
22 week's worth of irrigation of the project.

23 But going back to the actual issue of
24 silt at surface, the silt at surface becomes less
25 and less important with every pass of the scraper.

1 During the first pass of the scraper the topsoil
2 will be picked up. It will be moved over and
3 placed on top of the existing topsoil.

4 So now we have the first pass where the
5 silt content is somewhat lower because we're going
6 into depth. With every pass what we're doing is
7 we're cutting into lower silt content soil and
8 taking that lower silt content soil and layering
9 it on top of higher silt content soil.

10 So, in effect, your surface content silt
11 does change through the operation from the
12 beginning of the operation. We assumed 13 percent
13 silt for a lot of our road dust, our unpaved road
14 dust. And that 13 percent, again, represents the
15 conglomeration of that soil or the recomposition
16 of that soil.

17 But we also have an operation here where
18 the first thing that's going to be done is cut an
19 access road; put rock over the access road;
20 proceed with scraping and earthmoving, grading.
21 Cover much of that area with crushed rock so that
22 once again, once we're at that point, not only
23 will were we working with 13 percent at the front
24 end, because the soil is evolving daily, but once
25 we get past that stage we're still assuming 13

1 percent for our water trucks and that equipment.

2 The reality is they're running over crushed rock.

3 The other thing that is in our analysis
4 that, you know, it's a minor issue, yet it does
5 over-estimate emissions somewhat during that first
6 part of operation, is we do make some assumptions
7 about dump trucks. And I think maybe some
8 passenger vehicles, a couple of vehicles would
9 actually be onsite during grading operation.

10 However, our contractor tells us that's
11 impossible. There won't be those types of trucks
12 during grading operations, other than the types of
13 vehicles that would actually be servicing the
14 construction.

15 So the whole concept of surface silt
16 really starts to diminish from the first day of
17 operation.

18 MR. THOMPSON: Mr. Lany, one final
19 question. You heard Mr. Johnston talk about the
20 maximum value, and correct me if I'm wrong, Mr.
21 Johnston, the maximum value that received the silt
22 content of 12.2 percent in the area where you
23 expected the highest silt and this was at the
24 surface?

25 MR. JOHNSTON: Yes.

1 MR. THOMPSON: Now, Mr. Lany, given that
2 12.2 percent and the fact that you assumed 13.2
3 percent, isn't it correct to say that your
4 assumptions are conservative in that regard?

5 MR. LANY: I feel that they are.

6 MR. THOMPSON: Thank you. Mr. Johnston
7 and Mr. Lany are tendered for cross.

8 HEARING OFFICER FAY: Okay. Ms.
9 DeCarlo.

10 MS. DeCARLO: No questions from staff.

11 HEARING OFFICER FAY: Mr. Joseph.

12 (Pause.)

13 HEARING OFFICER FAY: Let's go off the
14 record.

15 (Off the record.)

16 MR. JOSEPH: First I want to
17 procedurally, has the applicant concluded its
18 rebuttal testimony?

19 HEARING OFFICER FAY: I believe that
20 they have.

21 MR. THOMPSON: In the area of silt, yes.

22 HEARING OFFICER FAY: In the area --

23 MR. THOMPSON: Of silt content.

24 HEARING OFFICER FAY: Oh, just -- oh,
25 silt. I see. Well, you know what I'd like to do

1 is have you put all your rebuttal on construction
2 impacts. And then people can ask anything about
3 that. Can you do that?

4 MR. THOMPSON: I can except Mr. Johnston
5 teaches a class at 5:00, and I was hoping to get
6 him out of here so he can teach his class.

7 HEARING OFFICER FAY: Okay, can we
8 accommodate that?

9 MR. JOSEPH: Sure.

10 HEARING OFFICER FAY: So, Mr. Johnston
11 is available only, or Mr. Johnston and Mr. Lany?

12 MR. LANY: I'm here for as long as --

13 HEARING OFFICER FAY: Mr. Lany's here
14 for -- why don't we --

15 MR. THOMPSON: Till they turn out the
16 lights.

17 HEARING OFFICER FAY: Why don't you have
18 at Mr. Johnston, and we'll try to accommodate his
19 schedule.

20 MR. JOSEPH: Thank you. And also one
21 other procedural question. In light of this
22 testimony I'm going to want to recall Dr. Fox to
23 respond to the new information.

24 HEARING OFFICER FAY: Understand.

25 MR. JOSEPH: Thank you.

CROSS-EXAMINATION

BY MR. JOSEPH:

Q Mr. Johnston, you testified about borings B-2, B-10, B-11 and B-26, is that right? Did I catch those numbers correctly?

MR. JOHNSTON: B-2, B-10, B-11 and B-26 are the borings that sieves were ran off of in our original study that showed on the C-1, yes.

MR. JOSEPH: Would you turn in your report to the log of boring B-2, please.

For members of the Committee it's also at tab F of the Fox/Pless testimony exhibit binder.

MR. JOHNSTON: I'm sorry, boring B-2?

MR. JOSEPH: Yes.

MR. JOHNSTON: Almost there. Got it.

MR. JOSEPH: And in tab F it's probably about a third of the way in.

MR. JOHNSTON: Yeah, I'm there.

BY MR. JOSEPH:

Q Is it correct that the uppermost material you encountered and logged for boring B-2 is bedrock?

MR. JOHNSTON: No.

MR. JOSEPH: So there's material here

1 that you encountered but you didn't log?

2 MR. JOHNSTON: That could be correct,
3 yes. These borings here, the particular ones
4 here, were done by either one of our staff
5 engineers or staff geologists. And technically on
6 this type of stuff here for borings such as this
7 we do not have the detail of the upper several
8 feet that a test pit would have. That's the
9 purpose, you know, people always say well, why do
10 you dig a hole as a boring and go out and dig a
11 hole with the backhoe. That's the whole purpose.

12 The actual first sample you really get
13 to look at is that first one, see where it says 50
14 on the blow counts. That's the number of hammer
15 blows it took to knock it down. And that one was
16 down there at about three feet.

17 But usually they sort of get an
18 indication from the return there. And this person
19 noted that there was -- their instructions were if
20 there's less than about a foot don't worry about
21 it, because that's not significant to the goals
22 that we're trying to attain at this time.

23 You know, like I said before, we were
24 not trying to determine the PM10 content for your
25 analysis. We were trying to determine, you know,

1 founding these heavy pieces of equipment.

2 So, to look at these logs and try to
3 say, oh, well, this describes the upper zero
4 inches would be leading you down the wrong
5 direction. This would be the stuff that we would
6 look at to give our engineers for removals.

7 Because it's like Mr. Lany had said,
8 when the dozer comes in there and removes the top
9 foot of that stuff, it's nothing, it's gone in a
10 second.

11 MR. JOSEPH: So then the information on
12 the top one foot is not information that you pay
13 much attention to because it wasn't relevant?

14 MR. JOHNSTON: On the borings, alone,
15 yes. On the trench logs that's a different case.

16 And if I may direct your attention --
17 you notice they did make a mention, because the
18 drillers will be calling out -- these things go
19 fast -- the driller will be calling out
20 information as the person's logging it. And he'll
21 say something and they'll jot it down.

22 And that pure description coming there
23 actually came from the first sample. But they
24 called out, and because it doesn't fit in there
25 well, the person put down at one foot becomes

1 hard. My guess is, but I wouldn't be able to say
2 for sure, but since I -- but my guess is, I
3 wouldn't be able to say for sure because I wasn't
4 there, but knowing the site like I do and what
5 this sounds like, it says at one foot becomes
6 hard, my guess is they encountered, he probably
7 had a foot of this spill on top, and then he
8 encountered the bedrock right there.

9 MR. JOSEPH: It's possible that top one
10 foot is where the bedrock isn't as hard as the
11 material below, is that right?

12 MR. JOHNSTON: That is also possible.

13 MR. JOSEPH: I'm not sure if this is a
14 question for Mr. Johnston or Mr. Lany. How many
15 watering trucks do you have scheduled for the
16 site?

17 MR. LANY: We have one truck scheduled
18 at this point.

19 MR. JOSEPH: And how many scrapers?

20 MR. LANY: Two.

21 MR. JOSEPH: Thank you. That's all the
22 questions.

23 HEARING OFFICER FAY: Anything further,
24 Mr. Thompson? Just of Mr. Johnston.

25 MR. THOMPSON: Right. We have nothing

1 further of Mr. Johnston.

2 HEARING OFFICER FAY: Okay. Thank you,
3 Mr. Johnston, I think that concludes our
4 questioning of you. We appreciate your testimony.

5 Now, Mr. Thompson, can we continue with
6 your complete rebuttal on construction air quality
7 impacts?

8 MR. THOMPSON: We can. I would like to
9 call an additional witness from the construction
10 company, TIC, to talk about -- address issues such
11 as gravel and the number of days of construction
12 of this top stuff. This should not take very much
13 time, but I'm a little reluctant to have
14 nonconstruction people talk about this.

15 If I could call Gary Doyal.

16 MR. JOSEPH: Mr. Fay, you know, the idea
17 here was that testimony was supposed to be filed
18 on August 13th. And we shouldn't be having a
19 series of witnesses for which there's been no
20 prefiled testimony, no notice and no advance
21 warning. That's not how the system is supposed to
22 work. You're supposed to conduct a hearing based
23 on the hearing order that this Committee issued.

24 And, you know, I don't know how we can
25 justify having a series of unannounced witnesses

1 parade up here when, you know, they're responding
2 to stuff that was in our prefiled testimony. It's
3 not how it's supposed to work.

4 MR. THOMPSON: It's actually quite
5 simple, Mr. Joseph. When you put on two and a
6 half hours of further direct, and your witnesses
7 mischaracterize things, it's really up to us to
8 come back and correctly characterize them.

9 And our belief is to have the best
10 witness do that that we can put up there.

11 HEARING OFFICER FAY: Can you -- let's
12 get away from the argument. Can you characterize
13 the testimony of this witness?

14 MR. THOMPSON: Yes. I'm going to ask
15 him about the practice of putting gravel on the
16 road. I'm going to ask him about construction
17 practices with water trucks.

18 One of our witnesses said they thought
19 there would be one water truck. I want to clarify
20 that. And the number of days that they're going
21 to be moving like the top foot or two feet of the
22 soil.

23 HEARING OFFICER FAY: Okay. I think the
24 Committee will indulge you, but we're concerned
25 about the surprise element.

1 MR. THOMPSON: Understand.

2 HEARING OFFICER FAY: Will the court
3 reporter please swear the witness.

4 Whereupon,

5 GARY DOYAL

6 was called as a witness herein, and after first
7 having been duly sworn, was examined and testified
8 as follows:

9 DIRECT EXAMINATION

10 BY MR. THOMPSON:

11 Q Would you please state your name and
12 place of business for the record, please?

13 MR. DOYAL: My name's Gary Doyal; I work
14 for The Industrial Company. And I'll be the Site
15 Manager at the project.

16 MR. THOMPSON: You heard a number of
17 witnesses talk about graveling the site and
18 graveling the road. Would you clarify for the
19 record what you intend to do with the gravel and
20 when?

21 MR. DOYAL: When we first put the
22 roadway in we will utilize the construction
23 equipment, the water trucks to mitigate the dust.
24 And we'll follow that up with the gravel.

25 MR. JOSEPH: Excuse me, could you speak

1 closer to the microphone, please.

2 MR. DOYAL: When we first get onsite to
3 put the roadway in, like Mr. Lany had said, we'll
4 use some water trucks to mitigate any dust or
5 anything from putting that in. And then install
6 the gravel right afterwards.

7 MR. THOMPSON: And you've heard
8 testimony about the silt content in the top one
9 foot, 18 inches of the surface area of parts of
10 the site.

11 In your opinion how many days will the
12 soil, for want of a better word, to a depth of a
13 foot or a foot and a half be handled by your
14 equipment?

15 MR. DOYAL: First thing, once we get
16 there, you know, we're going to water the site
17 like a week prior to commencing any of this. Then
18 we'll clear and grub, which is getting rid of the
19 weeds, some of that finer top soil and the other
20 loose material for approximately two days.

21 MR. THOMPSON: And the scraper activity
22 of the -- is the scraper something different than
23 what you just described?

24 MR. DOYAL: The scrapers, we'll use
25 those for the major balancing of the plant.

1 MR. THOMPSON: Okay, and how many days
2 will the scrapers be moving the top foot or 18
3 inches of soil?

4 MR. DOYAL: That shouldn't last more
5 than three or four days probably.

6 MR. THOMPSON: Okay. And finally, one
7 of our witnesses said that there would be one
8 water truck out there, but asked me to check.
9 What do you anticipate having as far as water
10 trucks on site?

11 MR. DOYAL: In the schedule as it is
12 right now we have one in the schedule. But we
13 will field as many water trucks as needed to make
14 sure that we don't have any problems with the
15 dust.

16 MR. THOMPSON: That completes our
17 rebuttal of Mr. Doyal.

18 HEARING OFFICER FAY: Ms. DeCarlo.

19 MS. DeCARLO: No questions.

20 HEARING OFFICER FAY: Mr. Joseph.

21 MR. JOSEPH: One moment.

22 HEARING OFFICER FAY: Go ahead.

23 CROSS-EXAMINATION

24 BY MR. JOSEPH:

25 Q Mr. Doyal, do you know how many watering

1 trucks were considered in the applicant's analysis
2 of combustion emissions for this project?

3 MR. DOYAL: One, sir.

4 MR. JOSEPH: Are you intending to
5 install gravel before you grade?

6 MR. DOYAL: We will, as we bring the
7 road in, we will put the gravel in. But as far as
8 during the clearing and grubbing of the site, no,
9 sir.

10 MR. JOSEPH: So the gravel comes after
11 you've graded something? You wouldn't want to put
12 the gravel down before you graded it, right?

13 MR. DOYAL: Correct.

14 MR. JOSEPH: Do you know what
15 concentration of PM10 a person can observe?

16 MR. DOYAL: No, sir, I don't.

17 MR. JOSEPH: That's all the questions we
18 have.

19 HEARING OFFICER FAY: Mr. Doyal, how is
20 the decision made as to the frequency of the water
21 truck passing, whether it should be done faster or
22 leisurely? Who makes that decision and how do
23 they make it?

24 MR. DOYAL: Generally the guy or the
25 supervisor or superintendent that's in charge of

1 the dirt equipment, he will decide how often the
2 water truck goes. And you can tell just by
3 looking after the scraper goes by if you need to
4 add more water or not.

5 We are in the process of trying to get a
6 subcontractor in that can take care of moisture
7 content for that and our other testing things for
8 later on in the project. So we can obtain the
9 maximum moisture content.

10 HEARING OFFICER FAY: So this is based
11 on experience in looking at the surface soil?

12 MR. DOYAL: Yes, sir.

13 HEARING OFFICER FAY: Okay. Is there
14 also going to be an air quality monitor on site
15 during construction that would have input into
16 these decisions?

17 MR. DOYAL: At this point I'm not sure
18 if one has been mandated.

19 HEARING OFFICER FAY: Okay. Thank you.
20 Mr. Thompson, any more?

21 MR. THOMPSON: No, we have nothing else.

22 HEARING OFFICER FAY: Now, I want the
23 parties to understand, does that complete your
24 rebuttal on construction impacts?

25 MR. THOMPSON: No. Mr. Lany has more --

1 we have more with Mr. Lany.

2 HEARING OFFICER FAY: Okay. Fine, let's
3 go ahead, then.

4 MR. THOMPSON: One thing, Mr. Fay, Mr.
5 Johnston made reference to these samples that were
6 taken just last week, and he was referring to this
7 diagram and the samples of -- I think we can get
8 copies if it would help the record to identify
9 this as an exhibit.

10 HEARING OFFICER FAY: This is not in the
11 record?

12 MR. THOMPSON: It's not in the record.

13 HEARING OFFICER FAY: Yeah, why don't
14 you get copies made and show them to Mr. Joseph
15 and Ms. DeCarlo.

16 MR. THOMPSON: Mr. Lany, do you want to
17 take a minute and get set?

18 MR. LANY: Yes.

19 (Pause.)

20 MR. THOMPSON: We're ready to proceed.

21 HEARING OFFICER FAY: All right, go
22 ahead.

23 DIRECT EXAMINATION

24 BY MR. THOMPSON:

25 Q Mr. Lany, what I would like to do is

1 proceed in the same way that staff did and go down
2 through the points of the executive summary
3 contained in exhibit 25, which is the Fox/Pless
4 testimony.

5 Feel free to take off from me if my
6 questions are inartfully asked or incomplete.

7 Issue one concerns the 24-hour
8 California ambient air quality standard for PM10.
9 And I believe that I heard CURE talk about if the
10 ambient outside-of-fence limit of 50 micrograms,
11 is 50 micrograms or higher, it is a violation and
12 significant.

13 Now, do you agree with that, or is there
14 anything you would like to add?

15 A It is a violation, 50 micrograms is the
16 ambient air quality standard for a 24-hour --

17 MR. JOSEPH: I'm sorry, Mr. Lany, I have
18 to ask you again to swallow the mike.

19 MR. LANY: The ambient air quality
20 standard is 50 mcg/cubic meter. Because we are
21 already in exceedance of that standard, the
22 significance would be based upon making a
23 determination at the delta for the increase of the
24 project is indeed significant.

25 BY MR. THOMPSON:

1 Q And under a proceeding of the California
2 Energy Commission is it the California Energy
3 Commission, under CEQA, that would make that
4 determination?

5 A That's correct.

6 Q Also the isopleths that we have do show
7 that there are increases above 50 micrograms or
8 that the resulting concentration from the plant,
9 itself, or from the operations or -- excuse me,
10 the construction, itself, is above 50 micrograms.

11 But I do want to point out that on that
12 eight-hour standard, based upon figure 1B, which
13 reflects the eight-hour construction schedule,
14 that standard is exceeded only on land that would
15 not be inhabited for a 24-hour period.

16 I can speak certainly with regard to
17 permitting practices. And when we take a look at
18 air quality impacts from a project for permitting
19 purposes, at least, South Coast certainly allows
20 us to take into consideration the likelihood of
21 the land being inhabited for that particular
22 averaging period.

23 I mean, for instance, we don't look at
24 roadways on an annual basis, but we would look at
25 roadways on a one-hour basis, or a two-hour basis,

1 because there could be someone there.

2 But, a 24-hour basis on this would fall
3 somewhere between there. Given the fact that the
4 standards are there to protect inhabitants, the
5 fact that a person wouldn't be there for the short
6 duration of the project during construction,
7 itself, for a 24-hour period does come to bear in
8 this analysis.

9 Q And in looking at figure 1B of exhibit
10 27, there's a little squiggly blue line that
11 represents that 50 microns. Do you know what will
12 actually be on that property when we do our
13 construction?

14 A Right now -- again, most of it
15 encompasses the roadway and what appears to be
16 probably an easement to the roadway that goes into
17 other property. The property that's impacted, if
18 you will, is basically limited to I think there's
19 storage of waste receptacles at this point. It's
20 right at the corner of two property boundaries.
21 It's not even in the useable portion of the total
22 property.

23 Q Is your response to CURE's issue one
24 complete, and if so, should I move on to number
25 two?

1 A On the 50 microgram, yes.

2 Q In CURE's issue number two there's a
3 discussion of a 24-hour increase in PM10 due to
4 the project. And when added to existing
5 background construction of the project would
6 contribute substantially to an existing violation.

7 And I think previously rule 1303 was
8 mentioned in this, but that has been -- has rule
9 1303 been described adequately to your
10 satisfaction?

11 A Most of the discussion of 1303 standards
12 not being applicable to a short-term project such
13 as a construction project is applicable. I am
14 satisfied it complements actually the language in
15 the LST guidance document from the District, which
16 is in exhibit -- attachment D of CURE's testimony,
17 where the District specifically specifies that the
18 1303 standard of 2.5 micrograms on a 24-hour
19 average is applicable to operation PM10 LSTs, but
20 not applicable to construction.

21 It also complements the discussion we
22 had with the District, and I think I discussed
23 this earlier, it does complement the guidance we
24 received from District CEQA Staff, not permitting
25 staff, on the same issue. Where they were adamant

1 that the District's regulation 13 thresholds are
2 not applicable to construction projects.

3 I want to clarify, the longer term, we
4 did take a look at, I believe the short term NO2
5 and CO given a new LST guidance.

6 Q Does that complete your comments on
7 CURE's issue two?

8 A No. There was some discussion about a
9 24-hour average being just that. And that even
10 though you can come into compliance with a 24-hour
11 average, you could be exceeding or you could have
12 a higher one-hour concentration.

13 The reality is there are shorter term
14 significant or ambient air quality standards for
15 PM10. The shortest duration we have is the 24-
16 hour average. And then we have the annual
17 average.

18 So, regardless of the discussion about
19 what could happen with peaks and valleys during
20 the 24-hour period, it is intended to be a 24-hour
21 average. And even based on South Coast's LST
22 guidance for voluntary significant determination
23 applicable to those receptors who could be
24 sensitive receptors who would be exposed or could
25 be exposed to the site for a full 24-hour

1 duration.

2 Q The next topic actually goes to
3 sensitive receptors if you are ready to go to
4 issue number four?

5 A Okay.

6 Q In CURE's discussion of issue number
7 four there was a substantial amount of discussion
8 of nearest sensitive receptor, and whether all
9 receptors are sensitive in the definition of a
10 sensitive receptor. And whether a residence is a
11 sensitive receptor or a business merely a
12 receptor. Can you clarify that for the record?

13 A Yeah, we shouldn't say we -- South Coast
14 is taking a look at this from two different
15 perspectives, and I think it's important to keep
16 both of those in mind.

17 The first is what has been discussed
18 today about the potential likelihood of, or the
19 potential for a receptor to be sensitive in a
20 residence, or a hospital or a nursing home or
21 school.

22 But to deal with that independently
23 without what South Coast defines as a sensitive
24 receptor for CEQA purposes is probably not
25 entirely appropriate.

1 South Coast does define a sensitive
2 receptor as a person in the population who is
3 particularly susceptible to health effects due to
4 exposure to a contaminant than the population at
5 large.

6 So, South Coast, itself, in CEQA
7 guidance does distinguish between a residential
8 receptor and what is truly a sensitive receptor.
9 The reason that South Coast considers residences
10 for these types of analysis, again, is simply for
11 the potential that a sensitive receptor could be
12 there. And the lack of control, again, that the
13 agency or that the applicant would have over that
14 land use.

15 A little bit different situation in this
16 particular circumstance.

17 Q Do you have any other definitions of
18 sensitive receptor -- anyone else that would be
19 helpful here?

20 A Well, you know, there are certain
21 guidance regarding, you know, the foundation for
22 an ambient air quality standard. And EPA says
23 that it establishes air quality standards, primary
24 standards are a set limit to protect public
25 health, including all the sensitive populations,

1 such as asthmatics, children and the elderly.

2 What EPA is saying here is that, you
3 know, they establish a standard; they do have to
4 make sure that the targets that they put out there
5 are low enough to protect these vulnerable people.
6 It is not an implication that the standards were
7 there and the population at large would have an
8 absolutely undue negative impact because of it.

9 Q So, Mr. Lany, given those definitions,
10 plus the fact that the two residents at what has
11 been determined to be the kennel will be absent
12 for approximately half of the construction period
13 on those construction days, is that what leads you
14 to believe that that kennel should not be
15 considered a sensitive receptor?

16 A Again, it's one of a few things, you
17 know. At an absolute minimum it meets the
18 definition or the guidance that the South Coast
19 applied if someone was looking at its voluntary
20 24-hour LST and saying that it should be applied
21 to those people who would be exposed for 24 hours.

22 You know, we do have other reasons why
23 we feel that these are not sensitive receptors.
24 They're not infants, they're not children, they're
25 not elderly. By their own count, they're not

1 particularly vulnerable. By their own count, they
2 have been exposed to the previous construction
3 operations at the site without adverse impact.

4 By their own account they, you know,
5 their choice of profession is one that pretty much
6 leads one to conclude that these are not
7 particularly vulnerable subsets of the population
8 at large.

9 Q Thank you, Mr. Lany. Can I move on? I
10 think that CURE skipped five and went to six. And
11 if that's acceptable, we'll do the same.

12 A I, myself, don't have a whole lot to say
13 about that, other than, you know, my experience
14 with South Coast in permitting. And I think
15 mirrors the experience that other people have with
16 the local District and other Air Districts in
17 permitting, and that is even though they may be
18 permitting a project with a large increase in
19 ozone precursors, even though they might be
20 permitting those under their exemption process for
21 emission offsets or mitigation, that the agencies,
22 themselves, do recognize that, you know, a single
23 project typically is not going to be in the
24 position to have a significant impact on ozone
25 formation, itself.

1 I think in South Coast's case they would
2 argue also that, you know, specially when you have
3 more of an inland source versus a coastal source.
4 I think Mr. Walters gave an example of that
5 earlier today.

6 Q Does that complete your discussion of
7 number six?

8 Question five is next where CURE did
9 their estimates.

10 A Well, we --

11 Q Let me introduce this first so the
12 record will be clear. There was some discussion
13 about the use of AP-42, which was characterized as
14 a mine-specific emission factor. Do you have any
15 comments on that?

16 A Yes. First of all I want to make sure
17 everyone understands when we chose the AP-42
18 emission factor for scraper drop operations, we
19 did so because it was actually a more conservative
20 number than the South Coast CEQA guidance document
21 would apply to their batch drop operations. And
22 that's what we did.

23 So the reality is now we're talking
24 about an emission rate or emission inventory
25 that's probably somewhere between two constraints.

1 I have a little bit of concern about the
2 documentation that was presented. Only that it
3 was stated that it was being done in support of
4 EPA, as development of AP-42 revisions. The thing
5 that I don't understand, and I guess that's just
6 the way life is, but the thing I don't understand
7 is that that study was released in 1996, in 1995
8 right before, possibly during the study, itself.
9 EPA was reviving chapter 11 of AP-42 that dealt
10 with drop operations.

11 Also there is another section of AP-42
12 that deals with construction emissions, and that's
13 one of the chapter 13 sections, that actually when
14 we talk about scraper drop it actually sends the
15 user to chapter 11.

16 Chapter 13 has portions of the word-
17 revised in the year 2003. So, I, myself am trying
18 to come to terms with why would EPA proceed with
19 the chapter 11 revision in 1995 if EPA knew that
20 Midwest Research was doing the analysis. And why
21 in 2003 when they were revising portions of
22 chapter 13, the actual construction chapter, would
23 they not incorporate it.

24 So if this was done in support of EPA
25 for some reason or another in each year as EPA

1 does not incorporate it into its guidance
2 document, it was not something that was available
3 to me in my calculations. It was not something
4 that was referred to me or recommended to me by
5 CEQA Staff, either.

6 Q Am I correct that you said that had you
7 not used this you would have used a more
8 conservative South Coast number?

9 A Yeah, and actually --

10 Q How much more conservative --

11 A -- at one time we didn't know that, but
12 South Coast, as we were doing some research South
13 Coast advised to their example calculations for
14 drop, batch drop operations had an error. And it
15 was a significant difference.

16 Let me see here. Well, for -- I can
17 give a relative example. We used the South Coast
18 batch drop calculation for some of our dirt
19 loading, the 120,000 pounds per day I think. And
20 we calculated based upon the published calculation
21 of 2.04 pounds per day.

22 When we made the correction that South
23 Coast advised us of, the emission rate became less
24 than one-tenth of one pound. So it was a fairly
25 significant difference.

1 We have not incorporated that change
2 into our inventory. There's another thing about
3 the scraper drop operation, that I think warrants
4 discussing.

5 The emission rate of 45 pounds per day,
6 which -- excuse me, 45 pounds per hour --

7 DR. FOX: 45 tons per hour, per scraper
8 hour.

9 MR. LANY: Per scraper hour. In our
10 discussion -- thank you -- in our discussion with
11 the contractor he advises us that the duty cycle
12 of the scraper would be that the batch drop
13 operation would be about 30 percent of the duty
14 cycle time.

15 So for the two scrapers I think we're
16 looking at 3.6 hours per day with our -- if I took
17 45 pounds per duty hour, my increase is not the 40
18 or 50 pounds that was discussed earlier today; it
19 would be 24 pounds.

20 But, again, it's an emission factor
21 that's between two extremes, the South Coast CEQA
22 guidance, as we know it, and the MRI data that was
23 presented here, so.

24 BY MR. THOMPSON:

25 Q Finally, and I think this is finally,

1 the AP-42 guidance, this wasn't based upon
2 scrapers in a coal mine, was it? It was a road,
3 is that correct?

4 A In the section 11, the section is on
5 coal mining, but it is just basically referenced
6 as topsoil. I believe that there was also some
7 other references to an average silt content of
8 16.something. Let me see.

9 I don't think I'm in a position to
10 comment on how the silt factor factored into the
11 EPA number, but it was topsoil. Yeah, it wasn't a
12 mining operation, per se; it was topsoil removal.
13 And that's in table 11.9-4.

14 Q And, Mr. Lany, is it your opinion that
15 the silt levels that you used in AP-42 were close
16 to what you expected at the site? If that wasn't
17 a reason that you selected it, fine.

18 A I selected it because I had two numbers
19 to choose from, and it seemed to be the prudent
20 approach.

21 (Pause.)

22 BY MR. THOMPSON:

23 Q Mr. Lany, do you have anything finally
24 to add?

25 A Well, there are, you know, other things

1 that, you know, we need to continue to feel that
2 our inventory is a reasonable inventory. Again, I
3 recently pointed out that South Coast advised that
4 their calculations for batch drop was incorrect.
5 And our adjustments to reflect their batch drop
6 calculation would be a reduction of about 2 pounds
7 per day.

8 We do feel that our combustion
9 particulates may be very very conservative based
10 upon the numbers that went into the analysis we
11 used defaulting the A factors for tier one
12 engines. But when we started to look at what our
13 engines were actually certified for, for a lot of
14 the equipment, we were seeing that our particulate
15 emission rates were certified, you know, probably,
16 in a lot of cases maybe 50 percent of that, I
17 would say, often around 75 percent.

18 We drew assumptions that neither the
19 welder or the forklifts were certified engines.
20 And the emission rates for noncertified engines
21 are pretty high, but now we're in the year 2004,
22 the forklift is likely to be rented and not coming
23 out of any fleet. And tier two engines are
24 available.

25 The forklift and welder had, you know,

1 sort of significant portions of the combustion
2 inventory for particulates. The welders, too, we
3 see tier two engines actually available on the
4 market. So it is conceivable that, you know, the
5 more modern equipment than the tier one that we're
6 looking at. Or at least numbers that went into
7 the analysis would be available.

8 The other thing that we didn't factor
9 into our analysis on combustion particulate is the
10 difference between not ultra-low sulfur fuel, but
11 today's California diesel fuel and EPA fuel -- or
12 the fuel that's used in the rest of the country.
13 And the fuel that's used for certification, when
14 CARB reformulated diesel fuel in 1993, EPA also
15 reformulated diesel fuel at about the same time.

16 Yet the CARB formulation was mandated to
17 be different because of lower emissions, that CARB
18 estimates on average that when using CARB low-
19 sulfur fuel, today's fuel in the market, emission
20 rates would actually be, on average, 20 percent
21 lower than what we would see that equipment
22 burning if it was in another state using the
23 typical federal fuel.

24 Q Finally, Mr. Lany, is it your
25 understanding that the project would use tier two

1 equipment if it's available?

2 A My understanding is that the project
3 will be required to use tier one equipment, as a
4 priority, I'd say, unless there's some sort of
5 exception. But, -- and I need to point out, too,
6 on some of these larger engines, tier two doesn't
7 mean that your particulate rates will be lower. I
8 think that's just a reality of the system and
9 where technology is today for the larger engines.

10 I think for the smaller engines, though,
11 what we'll see is a tier two engines, that they
12 are lower. I think that this is more a matter of
13 if it's available, and if it happens to be in the
14 fleet, that's a wonderful thing. But we're not
15 mandated to use tier two.

16 MR. THOMPSON: That completes our
17 rebuttal, thank you.

18 HEARING OFFICER FAY: That completes all
19 of your rebuttal on construction impacts for air
20 quality?

21 MR. THOMPSON: Give me 30 seconds here.

22 (Pause.)

23 BY MR. THOMPSON:

24 Q Mr. Lany, you have one more point?

25 A One more, yes. We've had some

1 discussion today about control efficiencies from
2 watering operations. And first of all, it's
3 important, we all understand that we don't --
4 control efficiencies in all of the calculations
5 that are made.

6 But what I want to speak to is the
7 guidance from South Coast CEQA Staff relative to
8 this issue. And the 68 percent, the 50 percent
9 control efficiencies that were cited with x number
10 of waterings. As we were researching other
11 resolutions to the many issues that came up during
12 this process, we did talk with the South Coast
13 CEQA Staff about that issue, in itself.

14 And basically what South Coast CEQA
15 Staff advised us is that we have to keep in mind
16 the audience for which the CEQA guidance was
17 written. They wrote that guidance for what they
18 refer to as often less sophisticated lead
19 agencies, less sophisticated contractors and
20 projects, again, where there is little control
21 over the operation -- or the construction of that
22 project.

23 South Coast cited other lead agencies,
24 though, who are more sophisticated, have more
25 experience and have more of control over the

1 construction of a project. South Coast cited CEC
2 by name, I did not invite it. They specifically
3 mentioned CEC as basically being in a different
4 situation, and reminded me again that those lead
5 agencies that are more sophisticated, they have
6 more of a handle on the operations or the
7 construction operations, South Coast would not
8 comment negatively or have an issue with the
9 higher of assumed control efficiency from a higher
10 monitored, more frequent watering.

11 Q And that's the 85 percent figure you've
12 used?

13 A That's the 85 percent figure that I've
14 used, and that CEC has used in other projects,
15 also.

16 MR. THOMPSON: Now I'm finished.

17 HEARING OFFICER FAY: Okay. Any cross-
18 examination, Ms. DeCarlo?

19 MS. DeCARLO: None from staff.

20 HEARING OFFICER FAY: Mr. Joseph.

21 MR. JOSEPH: Yes, just a moment, please.

22 MR. THOMPSON: Mr. Fay, would it be
23 appropriate while CURE's conferring to get the
24 next exhibit number on the test borings that were
25 completed last week that were produced by Mr.

1 Johnston?

2 HEARING OFFICER FAY: Yes, can you
3 identify that for us?

4 MR. THOMPSON: Yeah, this is -- well,
5 there's a cover letter; it appears to be an email
6 from Andrew Tardie. Andrew Tardie works with Mr.
7 Johnston at LOR. It was sent August 27th at 3:18
8 p.m. to David Tateosian. And it has the data from
9 TP-5, -6, -7 and -8 that Mr. Johnston referred to
10 in his testimony. And also has, by separate fax
11 and attached to this document, the designation of
12 where those excavation and tests were made on the
13 site. And then a graphic picture of -- I think
14 it's the distribution of the grade sites.

15 HEARING OFFICER FAY: Okay, that'll be
16 exhibit 32. Can I move that into evidence? Let
17 me distribute this.

18 DR. REEDE: We already have it.

19 MR. THOMPSON: Could I ask that exhibit
20 32 be entered into the record?

21 HEARING OFFICER FAY: And this was
22 testified to by Mr. Johnston?

23 MR. THOMPSON: Mr. Johnston.

24 HEARING OFFICER FAY: This is
25 documentary support for information he already

1 gave us?

2 MR. THOMPSON: That's exactly right. He
3 refers to this material a number of times in his
4 testimony. I just thought it would help the
5 record to see it graphically.

6 HEARING OFFICER FAY: Any objection?
7 Hearing none, we'll accept that.

8 (Pause.)

9 (Off the record.)

10 HEARING OFFICER FAY: Ms. Humboldt, can
11 we hear from --

12 MS. HUMBOLDT: Honorable Commission
13 Members -- does this work?

14 HEARING OFFICER FAY: That works, right.

15 MS. HUMBOLDT: My name is Mary Humboldt;
16 I live at 7407 Dufferin Avenue here in the City of
17 Riverside.

18 I spoke at your last hearing, and spoke
19 about the fact that I felt an entire environmental
20 review was necessary for this project. The plant
21 is to be built on the last undeveloped stretch of
22 the Santa Ana River, an environmentally sensitive
23 area.

24 There is a move abroad here to save the
25 Santa Ana River. As you know, most of it is a

1 concrete channel. But our stretch out here is a
2 beautiful comment on the history of what this area
3 was like in the past.

4 Also, there is a neighborhood, I
5 recently -- well, actually last week on Thursday
6 the AQMD held its environmental justice workshop
7 here at the Mission Inn, which I attended.

8 They encouraged us to come and speak
9 out. There is a neighborhood, mostly minority
10 people, that is right across Bandarin Boulevard
11 from this power plant. They will be greatly
12 impacted.

13 Right now they bear the fumes of the
14 waste treatment plant and now they will bear the
15 pollution from the power plant.

16 Notification on all of this is very
17 weak. I spoke with the AQMD gentlemen and they
18 said that there was not a high enough emissions to
19 notify the neighborhood. Consequently all they
20 will receive is a very tiny little notice in the
21 newspaper if they manage to find it.

22 What I wanted to ask you is that in 1989
23 we attempted to pass a growth control ordinance
24 here in Riverside County. And the board of
25 supervisors was so frightened by this that they

1 approved 189,000 homes in a two-week period. Most
2 of those homes have not been built.

3 With the number of homes that have
4 already been approved on the books here in
5 Riverside County, plus the incredible growth spurt
6 that is going on in San Bernardino County, it
7 makes sense that these new homes, and there
8 probably will be between 350,000 to a half a
9 million new homes, they need to be solarized.

10 Continuously polluting the air with
11 small power plants is not good energy for
12 California. We read that whole countries have
13 solarized in Europe. And we've been talking about
14 this in the United States, and here in California,
15 for the last 30 to 40 years about it's time to
16 solarize.

17 And you couldn't be in a better spot to
18 solarize, right here in Riverside and San
19 Bernardino Counties. We have the worst air in the
20 United States. The American Heart Association has
21 come out with studies saying that our extremely
22 high heart attack rate here in the area could be
23 caused by the air pollution, the PM10 pollution.

24 I ask that you vote for -- I don't know
25 if you vote, I'm not sure exactly what this

1 proceeding is, it's rather confusing -- but I ask
2 that you have an entire environmental review and
3 look into this very carefully.

4 That you not fast-track this project.
5 That you take into consideration the fact that we
6 do, indeed, have the worst air in the United
7 States of America. And with those new 350,000 to
8 500,000 new homes, our air pollution here, with
9 the commuting, is going to be just outrageous.

10 The reason the fellows from the AQMD had
11 to leave is because if they got on the freeway any
12 later than 3:30 they wouldn't be able to get to
13 where they were going.

14 I thank you for your time.

15 HEARING OFFICER FAY: Thank you, Ms.
16 Humboldt. I just want to point out that the
17 Energy Commission's Public Adviser's Office did
18 blanket the area surrounding the power plant site
19 with, I understand, hundreds of flyers and
20 communications with people in the neighborhoods
21 there.

22 So many so that many people were rather
23 alarmed and they came to our informational
24 hearing. And with interpreters they learned that
25 the project, in fact, does not impact them the way

1 that they thought it might.

2 In addition, I'm not sure you could call
3 this process fast-track. This is a small power
4 plant exemption process, but it will not be
5 completed in 135 days. And in addition, after the
6 briefs are filed in this case, and all the public
7 documents, and the Committee issues a proposed
8 decision, again that everybody in the public can
9 review. The full Commission won't take that up
10 before at least 30 days, so there will be all that
11 time to comment just like an EIR. And then the
12 full Commission will vote.

13 So there's quite a bit of process left
14 to go.

15 Okay, Mr. Joseph.

16 MR. JOSEPH: Yes.

17 CROSS-EXAMINATION

18 BY MR. JOSEPH:

19 Q Mr. Lany, I just wanted to ask you about
20 one portion of the testimony that you just gave.
21 You talked about the 24-hour average for the
22 ambient air quality standard. Would you agree
23 that the 24-hour average is calculated by
24 averaging some zero hours and some non-zero hours?

25 A Yes.

1 Q Would you also agree that it's possible
2 to get enough PM10 exposure in just a handful of
3 hours so that the average of those hours, with the
4 zero hours, could cause a violation of the ambient
5 air quality standards?

6 A I would, but what I don't have in front
7 of me, because of a standard not being
8 established, is what really would that mean. I
9 understand the issue that you have peaks and
10 valleys, but the reality is that there is not a
11 one-hour standard. That the agencies consider
12 those an average exposure over 24 hours. That is
13 the standard.

14 Q Are you saying that no matter how large
15 the exposure in say three hours, if the exposure
16 is not continuous for 24 hours you can't have a
17 violation of the 24-hour standard?

18 A I'm saying that's not the issue. The
19 issue is the standard is a 24-hour average. It is
20 not a three-hour average, it is not a one-hour
21 average, it's a 24-hour average.

22 Q You agree that exposure over a short
23 portion of the 24 hours could result in an average
24 exposure that exceeds the threshold, right?

25 A It could.

1 Q And in calculating a violation of the
2 ambient air quality standards, it is appropriate
3 to average the exposure over each of the 24 hours,
4 right?

5 A Yes.

6 MR. JOSEPH: Thank you. That's all the
7 questions I have.

8 HEARING OFFICER FAY: Okay. Redirect?

9 MR. THOMPSON: Just one.

10 HEARING OFFICER FAY: Okay.

11 REDIRECT EXAMINATION

12 BY MR. THOMPSON:

13 Q Taking that one step further, Mr. Lany,
14 if you have emissions during let's say an eight-
15 hour construction period, and not calculating the
16 24, but if your receptors are gone for four of
17 those hours, for example, four of the hours where
18 Mr. Joseph said they were higher emissions, would
19 that mean that the receptors are not breathing or
20 susceptible to those emissions?

21 A That would be correct.

22 MR. THOMPSON: Thank you, that's all.

23 HEARING OFFICER FAY: Ms. DeCarlo,
24 anything further?

25 MS. DeCARLO: None from staff.

1 HEARING OFFICER FAY: Mr. Joseph?

2 MR. JOSEPH: No.

3 HEARING OFFICER FAY: Thank you. Ms.

4 DeCarlo, do you have some rebuttal testimony on
5 construction?

6 MS. DeCARLO: Yeah, staff would like to
7 call Will Walters back just for a few questions.

8 HEARING OFFICER FAY: Okay. Mr.
9 Walters, why don't you just stay there and testify
10 from there.

11 MS. DeCARLO: And he has already been
12 sworn in.

13 Whereupon,

14 WILLIAM WALTERS

15 was recalled as a witness herein, and having been
16 previously duly sworn, was examined and testified
17 further as follows:

18 DIRECT EXAMINATION

19 BY MS. DeCARLO:

20 Q Mr. Walters, did you participate in the
21 analysis of the Salton Sea Geothermal project?

22 A Yes, I did.

23 Q And what did you conclude with regard to
24 the project's hydrogen sulfide emissions?

25 A I concluded that there was a potential

1 for an exceedance of the H2S standard alone
2 without adding background during commissioning
3 activities.

4 Q And what did you conclude with regard to
5 the potential for environmental impact? Did you
6 find it significant?

7 A No, we did essentially a probability
8 analysis to determine whether or not there would
9 be receptors in the area of impacts. One of them
10 was an area that was generally not habitated,
11 (inaudible). The other one had a very low
12 probability. It was an area where people went, it
13 was an elevated location within a wildlife refuge,
14 -- wildlife refuge, but there was a probability of
15 the impact so low during the period of time of
16 commissioning, which was only a few weeks, we
17 considered it would not be a significant impact.

18 Q And did the Commission agree with this
19 conclusion?

20 A Yes, they did.

21 Q And are you aware of whether Dr. Fox, on
22 behalf of CURE, submitted any comments on that
23 project?

24 A CURE submitted over 400 data requests in
25 that project. Attended the workshops up until the

1 point that they had an agreement, joint mitigation
2 agreement with the applicant.

3 Q To your knowledge was there any
4 objection by Dr. Fox or CURE to the Commission's
5 findings that an exceedance of hydrogen sulfide
6 emissions was not a significant impact?

7 A No, there was not.

8 Q Does that conclude your testimony?

9 A Yes, it does.

10 MS. DeCARLO: Staff is available for
11 comments -- or questions.

12 HEARING OFFICER FAY: Mr. Thompson?

13 MR. THOMPSON: No, I'm not going to
14 touch that.

15 (Laughter.)

16 MR. JOSEPH: Perhaps I shouldn't,
17 either, but I can't resist.

18 CROSS-EXAMINATION

19 BY MR. JOSEPH:

20 Q Mr. Walters, do you remember the
21 contents of the joint mitigation agreement that
22 CURE had with the developer?

23 A (inaudible).

24 Q Are there any provisions in there which
25 address hydrogen sulfide?

1 A There are none that address
2 commissioning emissions.

3 Q Pardon me?

4 A There are none that address the
5 commissioning emissions which were the emissions
6 that had potential for the exceedance.

7 Q Are there any measures in there that
8 address hydrogen sulfide?

9 A Yes. But not those that staff had the
10 issue where it would be a potential exceedance.

11 Q But they do address hydrogen sulfide
12 from the project, correct?

13 A Yes. And a bunch of other measures,
14 most of which were already in staff's assessment.

15 Q Well, --

16 A As recommendations, or conditions of
17 certification.

18 Q If it were relevant to this proceeding
19 we would want to respond to that. It's not
20 relevant. I think Mr. Walters' last statement is
21 chronologically incorrect, but it's not relevant
22 to the proceeding. And so I won't pursue it any
23 further.

24 HEARING OFFICER FAY: Thank you. All
25 right, anything further, Ms. DeCarlo?

1 MS. DeCARLO: No further questions.

2 HEARING OFFICER FAY: Mr. Joseph, I
3 understand you have some rebuttal testimony you
4 want to put on? Why don't we give you time to
5 talk about that during a five-minute break.

6 We're off the record.

7 (Brief recess.)

8 HEARING OFFICER FAY: We're back on the
9 record.

10 MR. JOSEPH: CURE would like to call
11 back Dr. Fox.
12 Whereupon,

13 J. PHYLLIS FOX
14 was recalled as a witness herein, and having been
15 previously duly sworn, was examined and testified
16 further as follows:

17 DIRECT EXAMINATION

18 BY MR. JOSEPH:

19 Q Dr. Fox, does Mr. Johnston's testimony
20 change your opinion about the surface silt
21 content?

22 A No, it doesn't.

23 Q Can you explain?

24 A He testified on the four new samples and
25 clarified that they are based on composite samples

1 from the surface down to x feet below the surface.

2 Had he done individual samples for the
3 surface silt content it would have changed my
4 opinion, but he did not, it was a composite. So
5 we still have the same quandary of not knowing
6 what the surface silt content was.

7 Staff, in their supplemental geology
8 testimony made an attempt to estimate what the
9 silt content would be in the upper soil fill there
10 by back-calculating it from information that was
11 provided in the geotechnical reports and new
12 samples. And they estimated 22 percent.

13 My revised emission estimates are based
14 on 18.

15 Q Dr. Fox, for what agency was the MRI
16 report done?

17 A The MRI report that I relied on for a
18 scraper emission factor was prepared for the South
19 Coast Air Quality Management District,
20 specifically to modify the construction emission
21 factors in AP-42.

22 Q Mr. Lany testified just now that 45
23 pounds per scraper hour that you testified about,
24 for scraper drop operations, actually includes all
25 scraper operations.

1 Did you use 45 pounds per scraper hour
2 just for drop operations?

3 A No, I did not.

4 Q Did you properly account for scraper
5 operations?

6 A Yes, I did. Our calculations explicitly
7 recognize that the 45 pounds per scraper hour
8 includes the digging, the hauling and the
9 dropping.

10 Q Does the recent explanation of graveling
11 the site affect your emission estimate?

12 A No, it does not affect them because our
13 calculations assume an 85 percent control
14 efficiency, which is very liberal for graveling
15 for a number of reasons.

16 First, the gravel lays on top of a layer
17 that has a high silt content, and the movement of
18 heavy equipment across that layer is going to kick
19 up some of the surface material.

20 And second, the weight of the heavy
21 equipment moving across that gravel layer is going
22 to crush some of it and create fines, which is
23 also going to contribute to the silt content.

24 Q But despite that you assumed that the
25 graveling would be 85 percent effective in

1 controlling emissions?

2 A Yes.

3 Q What is the effect if the applicant has
4 to have a second water truck to reach the watering
5 control efficiency assumed in the modeling?

6 A Each water truck contributes about 13.3
7 pounds per day of PM10 emissions. The current
8 emission estimates assume one water truck. If
9 they add a second one it would increase the
10 applicant's estimate of PM10 emissions by 13.3
11 pounds per day.

12 Q Dr. Fox, if you assumed that the most
13 recent silt content testimony from the applicant
14 is correct, how would that affect your previous
15 estimate of PM10 emissions which you said would be
16 119 pounds per day?

17 A If we assume that the applicant is
18 correct about silt content and go with their
19 numbers, it would revise my previous testimony
20 from 119 pounds per day to 101 pounds per day,
21 compared to the applicant's estimate of 42.

22 Q So is it fair to say that the silt
23 content is much ado about not very much?

24 A The silt content is much to do about
25 very much. The main factor that increases the

1 PM10 emissions is the scraper operation.

2 Q Finally, are you testifying that the
3 Energy Commission is bound by the South Coast Air
4 Quality Management District's CEQA significance
5 thresholds?

6 A No, I'm not. I'm testifying that in my
7 opinion exceedances of the South Coast's
8 significance threshold would result in a
9 significant impact.

10 MR. JOSEPH: Thank you, that's all our
11 questions.

12 HEARING OFFICER FAY: Okay. Mr.
13 Thompson.

14 MR. THOMPSON: One second, please.

15 We have nothing.

16 HEARING OFFICER FAY: Ms. DeCarlo?

17 MS. DeCARLO: A couple questions.

18 CROSS-EXAMINATION

19 BY MS. DeCARLO:

20 Q You referred to staff's geology
21 testimony, isn't it true that this testimony was
22 filed before the applicant submitted their most
23 recent sieve analysis?

24 A Yes, that's correct, but the recent
25 sieve analyses don't resolve the quandary that

1 staff was dealing with there.

2 Q In fact, didn't staff testify yesterday
3 that they no longer agreed with their initial
4 analysis that indicated potential 22 percent
5 impact, but now -- 22 percent silt content, excuse
6 me, but that now they agreed with the applicant's
7 estimation of the silt content?

8 A I must confess that I don't remember
9 that specifically. It's been a long day.

10 Q Were the BACM values incorporated into
11 AP-42?

12 A The which values?

13 Q The scraper emission factors of the 45.

14 A That's a complicated question. The
15 scraper emission factor that the applicant relies
16 on comes out of AP-42, section 11.9, which deals
17 with western surface coal mining. The western
18 surface coal mining section was last revised in
19 1998.

20 The MRI report that we relied on for our
21 scraper emission factor was developed for the
22 South Coast specifically to revise the emission
23 factors in AP-42 for construction, which is a
24 separate section of AP-42. That section of AP-42
25 has not been revised since 1995.

1 The MRI report that we relied on has a
2 date of 1996. So the MRI report came after the
3 last revision of the construction section of AP-
4 42.

5 Q So, EPA did not, in fact, revise AP-42
6 to accommodate that?

7 A There would be no reason to because the
8 revision of AP-42 that you're referring to has to
9 do with western coal mining, not construction.

10 Q Thank you.

11 HEARING OFFICER FAY: Is that all?
12 Okay. Mr Joseph, anything further?

13 MR. JOSEPH: No.

14 HEARING OFFICER FAY: Mr. Thompson?

15 MR. THOMPSON: No.

16 COMMISSIONER GEESMAN: If most of the
17 PM10 emissions come from a scraper operation is it
18 reasonable to assume that those emissions peak
19 when the scraper is removing the top foot to foot
20 and a half from the soil?

21 DR. FOX: In my opinion that's probably
22 where most of them would come from because it's
23 very hard to control dust right at the point where
24 the bucket is going into the ground. The water
25 truck just waters the surface and then with the

1 scraper you're digging down. The water that would
2 be sprayed from the water truck would only
3 penetrate the top few centimeters, and so you'd be
4 digging up material that hasn't been pre-wetted.

5 The existing moisture content at this
6 site is 3 percent or less. The calculations for
7 construction emissions assumed it was 15 percent.
8 So, in my opinion, most of the emissions would
9 come from that scooping or digging operation.

10 COMMISSIONER GEESMAN: Did you hear Mr.
11 Doyal testify that that would take place over a
12 two- to three-day period?

13 DR. FOX: I heard testimony similar to
14 that. I don't recall the exact number of days.

15 COMMISSIONER GEESMAN: Is that, in your
16 opinion, a fairly reasonable estimate?

17 DR. FOX: I have no basis for refuting
18 it because a detailed construction schedule and a
19 grading plan hasn't been produced in this case.

20 COMMISSIONER GEESMAN: Thank you.

21 HEARING OFFICER FAY: Dr. Fox, are you
22 aware of whether or not there are scrapers that do
23 apply water as they go?

24 DR. FOX: There is an attachment to my
25 prefiled direct testimony that discusses the

1 development of a system that does exactly what you
2 just asked me about.

3 The equipment, itself, for example, the
4 scraper would be equipped with nozzles on the
5 equipment, itself, to get at the issue that we've
6 been talking about.

7 I'm not aware that a scraper so equipped
8 is commercially available. The paper that I put
9 into the record summarizes experimental research
10 that was done seeking to develop such a
11 technology.

12 But I personally have never seen that
13 used.

14 HEARING OFFICER FAY: Okay, thank you.
15 Nothing further, Mr. Joseph? Okay. Thank you.

16 (Pause.)

17 MR. JOSEPH: Just one question, Mr. Fay.

18 REDIRECT EXAMINATION

19 BY MR. JOSEPH:

20 Q Dr. Fox, in your emission estimate what
21 watering control efficiency did you assume for the
22 scraper operations?

23 A 85 percent.

24 MR. JOSEPH: Thank you.

25 HEARING OFFICER FAY: Okay. No further

1 questions?

2 MR. THOMPSON: Just one.

3 RECROSS-EXAMINATION

4 BY MR. THOMPSON:

5 Q Dr. Fox, I think you seemed to indicate
6 in a response to a question from your counsel that
7 you thought that the scraper would be taking up
8 soil that was damp only a centimeter or two.

9 Are you aware that the project will be
10 irrigated for a week prior to construction?

11 A No, I'm not. Is that a condition of
12 exemption?

13 Q That's been testified to a number of
14 times here today.

15 HEARING OFFICER FAY: Okay, anything
16 further, Mr. Thompson?

17 MR. THOMPSON: No.

18 HEARING OFFICER FAY: All right. Do you
19 have anything further, Mr. Joseph?

20 FURTHER REDIRECT EXAMINATION

21 BY MR. JOSEPH:

22 Q Dr. Fox, is there any reason to assume
23 greater than the 85 percent watering control
24 efficiency assumed by the applicant?

25 A No, because our calculations assume 85

1 percent throughout the soil mass already.

2 Q Thank you.

3 HEARING OFFICER FAY: Okay. That
4 concludes the construction-related air quality
5 impacts testimony.

6 And we're now ready to move to operation
7 air quality impacts. I think we've got a maximum
8 of two hours, and so I urge the parties to be as
9 efficient as possible with their time. Otherwise,
10 we're just all back here tomorrow.

11 So, we'd like to move ahead and ask Mr.
12 Thompson if he's ready.

13 MR. THOMPSON: I am, and I will try --
14 maybe I'll start speaking very quickly so I can be
15 more efficient. I would like to recall Mr. Lany,
16 who has been previously sworn.

17 Whereupon,

18 KARL LANY

19 was recalled as a witness herein, and having been
20 previously duly sworn, was examined and testified
21 further as follows:

22 DIRECT EXAMINATION

23 BY MR. THOMPSON:

24 Q Mr. Lany, you're up here now on facility
25 operations, the air impacts of facility

1 operations. I only have one question, Mr. Lany.

2 As we are all aware, applicant has
3 agreed to offset the emissions from operations for
4 this facility. Do you have an update, or could
5 you give the Committee an idea of where you stand
6 on identifying sources for ERCs?

7 A Yes.

8 Q I used the right terminology.

9 A Well, sources for offsets. We're
10 looking at basically three basic categories of
11 offsets for the project. We have already secured
12 all of the NOx emission offsets for the project.

13 We are exempt from South Coast offset
14 purposes for the other pollutants, but are
15 required to comply with CEC's requirements to
16 offset.

17 For particulate emissions, again we're
18 looking at three sources, two of which are mobile
19 sources. Starting with the City's fleet, we have
20 started to weed through the City's fleet of heavy
21 duty mobile equipment, construction equipment.

22 We've so far identified about 160
23 vehicles for mobile sources that could be
24 candidates for particulate filters. There are
25 more. We don't know that all of these would

1 qualify for particulate filters. We still want to
2 take a look at some of these records, and some of
3 the aging issues with the fleet.

4 We also still have at our disposal the
5 local school bus fleet, which I believe is over
6 240 buses.

7 The third category that we are
8 considering for offsets and in accordance with the
9 CEC guidance in our emission offset credits
10 specifically looking at, in our case, SOx for PM
11 conversions.

12 We have received guidance from South
13 Coast that we hope to have formalized in the next
14 few days. They have conducted their analysis of
15 an appropriate offset ratio. And we believe that
16 that number is going to be about two-for-one if we
17 go with SOx credits.

18 In addition to that, we have been
19 working with the City's emission offset broker,
20 Cantor Fitzgerald, and they have conducted some
21 market analysis and spoken already with some
22 potential sellers of emission credits that could
23 be available for our project.

24 We have one seller who is willing to
25 sign an options contract with us. We also have

1 been advised by Cantor that they feel that there
2 are other potential sellers of SOx credits for
3 this project.

4 Given the City's experience with fleet
5 conversions, given the availability of sulfur
6 credits, we do feel strongly that the City will be
7 able to meet the requirements of offsetting for
8 the project.

9 Q I'm sorry, I apologize. That leads me
10 to one other question. If you can categorize
11 offsets as SIP offsets, which have certain
12 requirements, and CEQA offsets, which have other
13 requirements, has the District given you any
14 indication of which kinds of offsets they would
15 prefer that we get?

16 A Well, clearly for NOx offsets we are
17 required to have qualified credits, which we do,
18 reclaim offset credits. For VOCs that we do
19 qualify for the exemptions from offsets from the
20 South Coast.

21 But for VOCs, at least, the South Coast
22 does do an actual accounting to their offset
23 reserve accounts for state accounting purposes,
24 Because we're an ozone nonattainment, and they
25 will be setting aside in their accounting process

1 80 percent of our potential to be met, considering
2 that as likely actual emissions.

3 Whether or not we'll be able to
4 capitalize upon that with CEC Staff remains to be
5 seen, but it's out there.

6 As far as the other offset requirements
7 that we need, these are not offsets that are
8 required to mitigate in accordance with new source
9 review or any SIP provisions. They're totally
10 external to that. And that gives the Energy
11 Commission more leeway in determining eligibility
12 of reductions. And then coming to terms with how
13 to apply them.

14 So, the SIP standards that we normally
15 would have to meet really wouldn't apply here.

16 Q And is it your belief that South Coast
17 would prefer that we not get those SIP credits to
18 leave some growth left for the South Coast?

19 A We haven't had a formal comment from
20 them on that particular subject, but we have
21 received casual comment that they would prefer
22 that we not purchase emission reduction credits
23 because they feel that, you know, offsetting
24 outside of SIP is somewhat inequitable to their
25 regulated community who may need the credits in

1 the future to meet their own SIP requirement.

2 The reclaimed credits, the reclaimed SOx
3 credits that are available to us is a little bit
4 of a different situation. The reclaim regulation,
5 itself, is written specifically under the premise
6 that anyone can purchase reclaimed credits and
7 retire those credits for any purpose, not only
8 those people who would be needing credits under
9 South Coast permitting programs.

10 MR. JOSEPH: Mr. Fay, I would object to
11 the portion of Mr. Lany's answer which purports to
12 report a casual comment from some unknown person
13 at the South Coast Air District and ask that the
14 Committee not treat this as anything even
15 approaching South Coast policy or determination.

16 HEARING OFFICER FAY: Okay, we
17 acknowledge that it is hearsay. And we'll weigh
18 it accordingly.

19 MR. JOSEPH: Thank you.

20 BY MR. THOMPSON:

21 Q Mr. Lany, with that valuable hearsay
22 does that complete your testimony?

23 A Yes, it does.

24 MR. THOMPSON: Thank you.

25 HEARING OFFICER FAY: Mr. Lany's

1 available for cross-examination, I take it? Yes?

2 MR. THOMPSON: Yes.

3 HEARING OFFICER FAY: Ms. DeCarlo.

4 MS. DeCARLO: Staff has no questions of
5 this witness.

6 HEARING OFFICER FAY: Mr. Joseph.

7 CROSS-EXAMINATION

8 BY MR. JOSEPH:

9 Q Mr. Lany, I noticed yesterday between
10 here and the Maraud several City vehicles which
11 had stickers on the back that said "CNG powered".
12 I take it the City has a program underway to
13 convert its vehicles to CNG vehicles?

14 A The City does have an objective to, I
15 guess it's basically a clean fuel policy, yes.

16 Q And that's an ongoing program?

17 A Yes, it is. But CNG vehicles aren't
18 available for backhoes, concrete trucks, dump
19 trucks, front-end loaders, a lot of heavy duty
20 trucks. And they would still pose emission
21 reduction availability even if we -- we wouldn't
22 even turn our backs on CNG conversions for this
23 purpose, either.

24 Q They would be available for vehicles
25 that are part of the City fleet, right?

1 A Most of the CNG conversions that we see
2 tend to be gasoline-to-CNG. We don't see as, you
3 know, once you step outside of the bus program.

4 Q You haven't noticed the Riverside Public
5 Utilities utility vehicles that are CNG powered?

6 A They're there.

7 Q Pardon?

8 A I was not talking about the City's fleet
9 when I said most. I was talking about in general
10 how the market is structured.

11 A Okay. But we agree that the City has an
12 ongoing program to retrofit its own vehicles as
13 CNG vehicles, is that right?

14 A That's correct.

15 Q Were you here at the beginning yesterday
16 when Mayor Loveridge gave his testimony?

17 A No, I wasn't.

18 MR. THOMPSON: If I could point out that
19 was not testimony.

20 HEARING OFFICER FAY: His public
21 comment. Is your microphone on, Mr. Joseph?

22 MR. JOSEPH: It is, perhaps I'm not
23 holding close enough or my battery is gone. How's
24 this?

25 HEARING OFFICER FAY: -- try.

1 MR. JOSEPH: That's all the questions I
2 have for Mr. Lany.

3 HEARING OFFICER FAY: Excellent. Ms.
4 DeCarlo. Unless Mr. Thompson --

5 MR. THOMPSON: No, sir.

6 HEARING OFFICER FAY: Okay. Ms.
7 DeCarlo.

8 MS. DeCARLO: Staff recalls Will Walters
9 as our expert witness in air quality.
10 Whereupon,

11 WILLIAM WALTERS
12 was recalled as a witness herein, and having been
13 previously duly sworn, was examined and testified
14 further as follows:

15 DIRECT EXAMINATION

16 BY MS. DeCARLO:

17 Q Mr. Walters, what did you conclude with
18 regard to the project's potential for a
19 significant adverse impacts to air quality during
20 operation?

21 A We determined that with the appropriate
22 mitigation the project did not have significant
23 adverse impacts during operation.

24 Q Can you please describe staff's
25 significance criteria for operating emissions?

1 A Yes, it's in some ways similar to the
2 construction we used, the five items off the
3 checklist. However, operation is ongoing and as
4 has been noted previously, for years, 20, 30, 40
5 years, so the impact lasts longer. So we consider
6 the effects to attainment, considering the fact
7 that attainment for those pollutants won't happen
8 for years, like 2027, I believe, the eight-hour
9 standard, 2017, I can't remember which.

10 That these types of emissions will have
11 a greater potential for impact to the attainment
12 standard, so we are very careful about making sure
13 we mitigate all the nonattainment pollutants and
14 precursor criteria, nonattainment pollutants and
15 precursors. We essentially consider those
16 emissions to be significant. They need to be
17 mitigated to a one-to-one ratio during period of
18 operation.

19 For this particular project South Coast
20 is requiring mitigation on a one-to-one NOx
21 emissions through the reclaim program. And staff
22 is recommending that the other nonattainment
23 pollutants and their precursors will be mitigated
24 to a one-to-one with the staff's recommended
25 condition of exemption, AQ-1.

1 Q Do you believe that the applicant's
2 operate emissions estimate is reasonably
3 conservative?

4 A Yes, I do believe it is reasonably
5 conservative. I know in my recent discussion with
6 Ken Coates last week that South Coast, at least
7 his initial analysis, is using all of the emission
8 estimates that were provided by the applicant for
9 operation for their permitting basis.

10 Q What is your opinion of CURE's
11 contention that the turbine PM10 emission
12 potential is not being calculated correctly?

13 A Well, I think that CURE Is using some
14 old data and some questionable data, and some
15 sorted-through data in order to find source tests
16 that would show just that fact.

17 In my recent testimony I provided three
18 source tests, they weren't sorted through, they
19 were just the most recent, three recent LM6000s.
20 All of those source tests show well less than 3
21 pounds per hour for the PM10 emissions, including
22 fronthalf, back and backhalf.

23 I don't have enough knowledge on the old
24 tests that were performed. CURE did not provide
25 that level of information. Some of those tests,

1 when indicated to take a look at their other
2 references, the back reference they provide from
3 CARB that shows one of those sources had an
4 emission level of 2.5 pounds per hour. It would
5 have been, if the test was in exceedance of their
6 permit limit, I would assume that there was some
7 problems with the testing. And probably retest
8 and shown to be in compliance. However, we've
9 never gone to that level of data, or could we
10 discern where that was the case, which is the
11 summary that was provided in CURE's testimony.

12 So in looking at what has been permitted
13 and the source tests, I believe the 2.0 pounds per
14 hour is reasonable; has been permitted in the
15 past; has been accepted by the Commission in the
16 past at that level, and at lower levels for
17 several projects. For essentially the same
18 turbine, simple cycle equivalent design.

19 Q Does the project's operating CO
20 emissions have any potential to create significant
21 impacts as CURE contends?

22 A No. This is a condition that really got
23 me shaking my head, because I think this is the
24 reason why we don't use the emission limits, South
25 Coast emission limits. Again, we used the five

1 standards in the checklist to determine whether or
2 not the CO could have a possible impact.

3 South Coast will permit the source so
4 that it will not impede their attainment status,
5 and of course, it's (inaudible). In reality the
6 CO is well in attainment out in this particular
7 area. The only nonattainment area that's left in
8 the South Coast Air Basin is in South Central Los
9 Angeles. Will come into attainment through motor
10 vehicle reduction, certainly not through
11 stationary source reduction in that area.

12 The other standards are will the project
13 cause an exceedance. It was clear through the
14 modeling results that there's no potential, not
15 even close, during any type of operation from
16 operation there could possibly be an exceedance of
17 the CO standard.

18 Let's see, the fifth one is whether or
19 not there could be an odor. CO, of course, is an
20 odorless gas, so that's not an issue.

21 The other is cumulative impacts. And,
22 again, there's just no potential there can be a
23 cumulative impact that would cause an exceedance
24 of the standard in there. But we do not consider
25 a (inaudible).

1 And (inaudible) fourth one (inaudible)
2 substantial concentrations again, since we're so
3 far under the ambient air quality standard of
4 California and national, there's no potential for
5 impact in that regard. That contention is based
6 on emission number and not based on a real impact
7 potential.

8 Q What is your opinion of CURE's
9 contention that the project is not properly
10 defined, and that the mitigation is not properly
11 defined, and that it will not mitigate the
12 project's impacts.

13 A The way we have designed AQ-1 is
14 actually very similar to other recent projects
15 where we were requiring additional CEQA
16 mitigation. For example, Los Esteros has very
17 similar condition. Other older projects, Otay
18 Mesa had a condition that was even looser than
19 those one. It just required a certain amount of
20 money to be used to provide a certain amount of
21 emission mitigation.

22 What we're requiring here is very
23 specific in terms of what is required. It's
24 requiring a one-to-one for the emissions from the
25 project. Those emissions will have to be updated

1 if there are any changes to the design, if South
2 Coast requires any changes, or makes any
3 modification in their permit, so that we stay
4 updated and make sure that they do mitigate those
5 permitted emissions, and again, permitted
6 emissions, not actual emissions, that will occur
7 every year at a one-to-one.

8 You have to refresh my memory on the
9 question because I just lost my place.

10 Q On whether or not you believe that that
11 mitigation identified will, in fact, mitigate the
12 project's impacts.

13 A And second part is the types of
14 mitigation. We've identified several sources of
15 mitigation, and investigate whether or not there's
16 a reasonable potential for those sources to be
17 done by the time the project begins operation.

18 And we believe that certainly SO2 RTCs,
19 if nothing else, certainly they will. We prefer
20 the local mitigation. We think that it's
21 preferable from a public health standpoint and
22 from a true mitigation standpoint, to get your
23 mitigation closer to the source.

24 But we're not going to require things
25 that are different than what air agencies require,

1 so we will allow emission reduction credits and
2 RTCs to be used as appropriate. And through
3 consultation with South Coast, to follow their
4 procedures on air pollutant (inaudible), et
5 cetera, so that the project will be able to be
6 mitigated.

7 And as I've noted, our investigation
8 shows that that -- there shouldn't be any problems
9 in the intervening, I don't know, ten months from
10 now, or more, when the project will begin its
11 initial commissioning activities. And if there
12 were, the condition basically would stop them from
13 beginning operations till they were able to
14 identify all the emission reduction credits.

15 Q In your construction impact testimony
16 you referred to Kings River and MID as being
17 similar SPPE projects. Can you make a comparison
18 with those projects with regard to operation
19 impacts, as well?

20 A Yeah, the operation impacts are also
21 very similar. There are some different
22 assumptions in some startup emission conditions
23 and some other things. But, basic findings are
24 the same. There were no new exceedances of any
25 ambient air quality standards. There was a very

1 small marginal increase in the PM10 emissions due
2 to operation. A simple cycle plant will always
3 have very small incremental downwind conditions
4 because of the buoyancy of the plume. It's just
5 very hard for the emissions to get back to ground
6 very quick, so it takes a long -- it just takes a
7 long time, it disperses to a great degree before
8 it gets to (inaudible) impact.

9 And in terms of the operation of the
10 plants, this plant is set for a limitation of 1330
11 hours. The other two plants' limitations are
12 considerably more; it's 1350 for Kings River, and
13 a limitation of no more 8000 hours. And this is
14 per hour per turbine, all simple cycle, all
15 supposedly peaking plants, 8000 hours for the
16 project.

17 Q And does this conclude your testimony
18 for operational impacts?

19 A I guess I'd like to go on one other
20 issue that was raised, which is ammonia. Staff's
21 position on ammonia, since it is a pollutant that
22 is a result in emission reduction technology, is
23 that our goal is to reduce those emissions as much
24 as possible. We believe 5 ppm slip limit does
25 that.

1 In fact, we have, in many cases, tried
2 to get 5 ppm slip limit where the applicant does
3 not agree, where the District does not agree. Not
4 this District, this District believes in the 5 ppm
5 limit. And actually, we're not able to get that
6 limit and do not win our arguments in those cases.
7 So obviously you might imagine we're quite
8 satisfied with the 5 ppm limit. Particularly for
9 a peaker project with a high temperature SCR
10 system, we feel that's a better, long-term ammonia
11 slip limit.

12 And that is the end of my testimony.

13 MS. DeCARLO: The witness is available
14 for cross-examination.

15 HEARING OFFICER FAY: Mr. Thompson.

16 MR. THOMPSON: No questions, thank you.

17 HEARING OFFICER FAY: Mr. Joseph.

18 MR. JOSEPH: Just one question.

19 CROSS-EXAMINATION

20 BY MR. JOSEPH:

21 Q Mr. Walters, you referred to Otay Mesa.
22 The emission reduction credits there were mobile
23 source emission reduction credits that were SIP
24 approved, is that right?

25 A Actually there were two parts. I was

1 not referring to that particular part of the
2 program which was under the jurisdiction of the
3 agency, per se. It was a different condition than
4 what I was referring to, which was the \$1.2
5 million that was required that had less
6 specificity than our AQ-1, quite a bit less.

7 Q That was in addition to ERCs that were
8 SIP approved, is that right?

9 A That was additional CEQA mitigation just
10 as AQ-1 was additional CEQA mitigation. The first
11 was actually required by the District, as well.

12 MR. JOSEPH: Thank you. That's all our
13 cross-examination for Mr. Walters.

14 HEARING OFFICER FAY: Ms. DeCarlo?

15 MS. DeCARLO: No direct.

16 HEARING OFFICER FAY: Okay. Thank you,
17 staff.

18 MS. DeCARLO: Redirect.

19 HEARING OFFICER FAY: Is CURE prepared
20 to go forward?

21 MR. JOSEPH: We are.

22 HEARING OFFICER FAY: Okay.

23 MR. JOSEPH: Can we take a two-minute
24 break?

25 HEARING OFFICER FAY: Sure.

1 (Brief recess.)

2 MR. JOSEPH: Thank you. CURE calls Dr.
3 Fox. And continuing with our protocol from
4 before, we are now going to address our issues --
5 excuse me, impacts seven and eight, which deal
6 with PM10 emissions during operation of the
7 project.

8 Whereupon,

9 J. PHYLLIS FOX

10 was recalled as a witness herein, and having been
11 previously duly sworn, was examined and testified
12 further as follows:

13 DIRECT EXAMINATION

14 BY MR. JOSEPH:

15 Q Dr. Fox, first will you tell us about
16 the South Coast Air Quality Management District's
17 determination of what a significant PM10 impact
18 from operation is?

19 A Can you repeat that? I wasn't looking
20 at you.

21 Q Yes. Can you tell us about the South
22 Coast Air Quality Management District's
23 determination of what a significant impact from
24 PM10 is from operation?

25 A The South Coast Air Quality Management

1 District has two sets of significance thresholds
2 that it uses for operation. The first are the
3 emissions significance thresholds from the CEQA
4 guidelines, which are behind tab H of our prefiled
5 direct testimony.

6 Q Excuse me, Dr. Fox, is your microphone
7 on?

8 Try it now.

9 (Off-the-record microphone discussion.)

10 DR. FOX: Hello. Is it on? It's on.
11 Okay.

12 BY MR. JOSEPH:

13 Q I'm sorry, I lost track of where you
14 were in your answer.

15 A Should I start over? Did we get that on
16 the record or --

17 HEARING OFFICER FAY: You better start
18 over. Why don't you re-ask the question.

19 BY MR. JOSEPH:

20 Q Can you tell us about the South Coast
21 Air Quality Management District's determination of
22 what a significant PM10 impact from operation is?

23 A Yes. The South Coast Air Quality
24 Management District's CEQA guidelines contain
25 emission significance thresholds that apply to

1 project operation. And those are contained in tab
2 H of our direct prefiled testimony.

3 Q What are the PM10 impacts from operation
4 from the project?

5 A The emissions estimated by the applicant
6 and presented in staff's supplemental testimony
7 are contained in air quality table 16 on page 4-8.

8 Q That's in the supplemental testimony,
9 correct?

10 A In the supplemental testimony, that's
11 correct.

12 Q And what is that number?

13 A It shows that the total PM10 emissions
14 from operation are 144.93 pounds of PM10 per day.

15 Q And how does that compare to the South
16 Coast's significance threshold?

17 A The South Coast emissions significance
18 threshold is 150 pounds per day.

19 Q Can you summarize for us why you
20 nevertheless conclude that PM10 emissions will
21 exceed the South Coast's threshold?

22 A Well, in my opinion, based on ample
23 information in the record, the applicant's PM10
24 emissions from the turbines have been under-
25 estimated. They assume that the PM10 emission

1 rate for one of the LM6000 turbines is 3.0 pounds
2 per hour.

3 That number is based on a GE guarantee.
4 GE is the vendor of the LM6000 turbines that are
5 being used. That 3.0 number is based on a GE
6 guarantee which is applicable at 100 degrees
7 Fahrenheit. In addition, it includes some other
8 rather restrictive conditions. But the most
9 troubling one is the 100 degree Fahrenheit number.

10 The emissions from gas turbines depend
11 on the ambient temperature because gas turbines
12 are constant volume machines. And as the ambient
13 temperature drops, you have to fire or burn more
14 fuel to generate the same amount of electricity.

15 So PM10 emissions from gas turbines
16 increase as temperature decreases. The guarantee
17 for this project is at 100 degrees Fahrenheit.
18 The average ambient temperature during the period
19 when this project would operate, based on the
20 applicant's testimony and prior hearings in this
21 case, is 72.2 degrees F.

22 At that average operating temperature
23 the PM10 emissions would be higher than at 100
24 degrees Fahrenheit. And based on GE data for
25 identical and/or similar turbines in other cases,

1 including in other states, the PM10 emission rate
2 at 72 degrees Fahrenheit would be 3.1 pounds per
3 hour or higher.

4 If they are as much as 3.1 pounds per
5 hour rather than the 3.0 assumed in the
6 applicant's calculations, the maximum daily
7 emissions would exceed the South Coast's
8 significance threshold of 150 pounds per day,
9 resulting in a significant impact.

10 Q Dr. Fox, you've also presented in your
11 testimony source tests to support the notion that
12 the possibility of emitting greater than 3 pounds
13 per hour was not hypothetical, but real. Can you
14 describe those source tests?

15 A Yes. My testimony includes a number of
16 source tests. A source test is a measurement that
17 is made on the emissions coming out of the stack
18 of a facility.

19 I summarized all of the source tests
20 that I had in my possession that were done on
21 similar gas turbines, that is LM6000 gas turbines.
22 And I used those because that's all that I had at
23 the time that I prepared the table. I prepared
24 the table long before the testimony was filed.

25 I knew about and had those particular

1 source tests because they had been previously
2 relied on by the California Air Resources Board in
3 CARB in putting together the power plant guidance
4 manual.

5 I made an attempt when I prepared this
6 testimony to get source tests for more recent
7 LM6000 projects. This Commission has licensed a
8 number of LM6000 projects in the last couple of
9 years. And we made an effort to get those source
10 tests by filing public record act requests with
11 the agencies, the Air Districts that had actually
12 issued permits to them. And at the time this
13 testimony was filed we had not gotten responses.

14 When we realized that we weren't going
15 to get responses in time to file this testimony,
16 we called up the Energy Commission to see if they
17 had copies. Because commonly source tests are
18 provided to the Energy Commission as part of the
19 verification of conditions of certification. And
20 the Energy Commission told us that they did not
21 have any of the source tests.

22 So I was totally astonished when Mr.
23 Walters filed his testimony based on more recent
24 source tests and included excerpts from some of
25 them. I did not have access to any of that

1 information when I filed my testimony.

2 Q Do those more recent source tests change
3 your conclusion that emissions from this turbine
4 may exceed 3 pounds per hour?

5 A No, it does not. In fact, the
6 additional source tests that Mr. Walters provided
7 confirm my conclusion.

8 Q In his testimony, his written testimony,
9 Mr. Walters makes the point that one problem with
10 the source tests that you used was that the sulfur
11 content in northern California would be different
12 than the sulfur content in southern California.
13 Can you comment on that?

14 A Well, Mr. Walters argued that the source
15 tests that I relied on were not representative
16 because they're in Sacramento and this project is
17 in the South Coast. And that the sulfur content
18 of the gas in the two places vary.

19 And to support that he attached to his
20 testimony information from Pacific Gas and
21 Electric and SCE, which reported the maximum
22 allowable sulfur content that each of those
23 utilities delivers to its customers.

24 That's not relevant in this case for a
25 number of reasons. First, the gas that's

1 delivered on a day-in-and-day-out basis is not
2 necessarily at the maximum. In fact, it's usually
3 much lower.

4 And second, when I saw Mr. Walters'
5 testimony I went back and looked at the source
6 test that I had relied on from the Sacramento area
7 to see whether or not the sulfur content was high.
8 And, in fact, the sulfur content for almost all of
9 the source tests that I relied on was extremely
10 low.

11 The sulfur in fuel is burned, is
12 converted into sulfur dioxide or SO₂. Essentially
13 98-plus percent of fuel sulfur ends up being
14 emitted as sulfur dioxide.

15 Sulfur dioxide was measured in many many
16 of the tests that I relied on. And the emission
17 rate of sulfur dioxide was typically .03 to .04
18 pounds per hour, which is a very -- if you assume
19 that 100 percent of that contributes to the PM₁₀,
20 it's a very tiny fraction.

21 So, the issue is really irrelevant. And
22 furthermore, I took all of the SO₂ data that I
23 could find and I attempted to correlate it with
24 the PM₁₀ emission rate. And what I found was
25 there was no correlation.

1 A couple of the source tests that I
2 relied on had actually used digester gas as a
3 fuel, rather than natural gas. Digester gas has
4 very high concentrations of sulfur in it. And the
5 SO2 emission rates for those tests were 5 to 6
6 pounds per hour, but the PM10 emissions from those
7 tests were less than 3 pounds per hour.

8 So the conclusion is that the fuel
9 sulfur issue raised by Mr. Walters is really a
10 non-issue.

11 Q Dr. Fox, Mr. Walters also criticized
12 your testimony because the source test relied on
13 older turbines. Do you want to respond to that?

14 A Yes. There are two sources of PM10, two
15 possible sources of PM10 emissions from a gas
16 turbine. The first is any particulate matter that
17 might be present in the air that is sucked in.
18 You have to provide air to burn gas, so the
19 turbines draw in some ambient air. And
20 particulate matter that's in that air is sucked
21 into the turbine and emitted.

22 Except these turbines have an ambient
23 air filter that removes most of the particulate
24 matter. I did some back-of-the-envelope
25 calculations and found out that particulate matter

1 in ambient air contributes less than 1 to 2
2 percent of the stack emissions. So that is not a
3 major source, and I eliminated it.

4 The other source of particulate matter
5 emissions from gas turbine is the gas, itself.
6 And it doesn't matter what the age or the make of
7 the turbine is, the key factor is the amount of
8 gas that's burned.

9 In fact, if you look in AP-42, which
10 we've been talking about all day, that's EPA's
11 emission estimating report, you'll find that they
12 report one single PM10 emission factor that's
13 applicable to all turbines. They don't
14 distinguish between old LM6000s and new LM6000s or
15 LM6000s in frame machines like a GE 7FA. The same
16 emission factor is applicable.

17 MR. JOSEPH: For the Committee's benefit
18 we raised in our comments on the initial study a
19 legal issue about compliance with the four-ton-
20 per-year threshold under the South Coast rules.
21 We won't be offering any testimony on that. It's
22 purely a legal issue. We will include it in our
23 brief.

24 So, with that I'd like to move on to the
25 retrofit mitigation program that appears as a

1 proposed condition of exemption, and about which
2 we heard some additional testimony shortly before
3 this.

4 I want to go through the condition AQ-1,
5 and the recent testimony and ask you about several
6 pieces of that.

7 BY MR. JOSEPH:

8 Q First, with respect to retrofitting city
9 fleet vehicles, given the City's CNG conversion
10 program would it be effective mitigation for CEQA
11 purposes if a vehicle is running on CNG?

12 A Well, CNG would have very low -- are we
13 talking about PM10 here?

14 Q Yes.

15 A CNG would have very low PM10 emissions
16 so you wouldn't want to put a particulate trap on
17 a CNG engine.

18 Q Why wouldn't you want to?

19 A The emissions of PM10 are quite low
20 anyway. And typically the removal efficiency is a
21 function of the concentration, so it wouldn't be
22 particularly effective.

23 Q Now, with respect to the second source
24 of mobile emissions that Mr. Lany identified,
25 school buses. First of all, do you agree that

1 retrofitting school buses will reduce emissions?

2 A Retrofitting school buses will
3 definitely reduce emissions, assuming that the
4 school buses that you're retrofitting are diesel
5 fueled.

6 Q If they will reduce emissions then
7 what's the problem with using that as mitigation
8 in this case?

9 A My understanding, based on three decades
10 of working on CEQA and working on many hundreds of
11 these types of issues, is for purposes of
12 mitigating CEQA impacts the mitigation must be
13 local. In other words, you must mitigate the
14 impact where it occurs.

15 If you have one ton per day of emissions
16 at a specific point, those one tons cause impacts
17 in the local area.

18 You don't mitigate that impact by
19 offsetting or reducing emissions that are 50 miles
20 away or 10 miles away. It doesn't mitigate the
21 specific impact where it occurs.

22 Q Is there also a seasonal issue in this
23 case?

24 A Yes. There's a couple issues with the
25 proposed program, particularly the school bus

1 program. It not only does not mitigate at the
2 location where the impact occurs, but you're
3 dealing with mobile sources that don't necessarily
4 just serve the local area.

5 But there's a mismatch in terms of hours
6 of operation, days of operation and months of
7 operation. The school year, for example, in the
8 Riverside area generally starts in August or
9 September and runs through May or June. I
10 understand some of the schools operate through the
11 summer, but most of them August/September through
12 May or June.

13 This is a peaker project, which, based
14 on the applicant's testimony, would primarily
15 operate in the summer months when most schools are
16 in recess. And therefore there wouldn't be any
17 school buses.

18 So the proposal would be to retrofit
19 school buses that operate at a time other than the
20 specific time when this project would be emitting
21 at its peak level.

22 Another issue is the school day
23 typically ranges from 8:00 a.m. to 3:00 or 4:00
24 p.m. This project is currently proposed to
25 operate 24 hours a day. The school year typically

1 is Monday through Friday. This project could
2 operate seven days a week.

3 So we have a complete mismatch in terms
4 of hours of operation, days of operation and
5 months of operation, as well as the possibility
6 that the buses could serve an area other than the
7 local area where the project is located.

8 Q Finally, Dr. Fox, the staff says in
9 response to this topic that staff's requirement
10 for mitigation is not a daily requirement, it is
11 an annual emission reduction requirement. Do you
12 have a response to that statement?

13 A Yes. The impacts occur on an
14 instantaneous basis; the standards are violated
15 and people are exposed on a one-hour, eight-hour,
16 24-hour or daily basis. And to comply with CEQA,
17 in my experience, you have to mitigate in time and
18 in place.

19 And so just because you offset an annual
20 amount doesn't mean that you offset the emissions
21 on a shorter timeframe like a 24-hour timeframe
22 for purposes of offsetting an impact based on a
23 daily threshold.

24 MR. JOSEPH: Mr. Fay, that's the end of
25 our testimony on issues seven and eight. For the

1 other impacts, in the interest of time we're
2 prepared to submit, based on the prefiled written
3 testimony, and given the state of the record and
4 the legal standards in this case, seems to be
5 overkill to spend any more time rehearsing this
6 orally.

7 So, Dr. Fox is available for cross-
8 examination.

9 HEARING OFFICER FAY: Thank you. Mr.
10 Thompson.

11 MR. THOMPSON: Thank you, I just have a
12 couple questions. And we'll have a small amount
13 of rebuttal.

14 CROSS-EXAMINATION

15 BY MR. THOMPSON:

16 Q Dr. Fox, do I understand you correctly
17 that part of the basis of your testimony is that
18 GE will not meet its guarantees?\

19 A I think my testimony is that GE's
20 guarantee is based on 100 degrees Fahrenheit.

21 Q These source tests that you referred to
22 that are the basis of a substantial amount of your
23 testimony, are those the results that are on pages
24 32 and part of 33 of your prepared testimony?

25 A Yes, that's some of them. I've acquired

1 more since.

2 Q And finally, do you know for certain
3 that the City of Riverside does not have year-
4 round schooling?

5 A I have not conducted a survey. I
6 understand that some of the schools operate year-
7 round, but not all of them. But I personally have
8 not surveyed.

9 Q Fine.

10 MR. THOMPSON: That's it for cross. We
11 do have some redirect of our own witness.

12 HEARING OFFICER FAY: Thank you. Ms.
13 DeCarlo?

14 MS. DeCARLO: Staff has no cross for
15 this witness.

16 HEARING OFFICER FAY: Okay. Then we'll
17 move to Mr. Thompson --

18 MR. JOSEPH: Mr. Fay, I have just one
19 clarifying question, follow up.

20 HEARING OFFICER FAY: Redirect, okay.

21 REDIRECT EXAMINATION

22 BY MR. JOSEPH:

23 Q Dr. Fox, can you clarify whether the
24 source tests that are in table 5 of your testimony
25 are the sole basis for your conclusion about

1 emissions, or are there other source tests and
2 other information, as well?

3 A There's other source tests and other
4 information, as well. There's additional
5 information in the application from GE that
6 indicates that the emissions from an individual
7 turbine are 5.5 pounds per hour.

8 In addition, I have acquired additional
9 source tests; and I also took a look at the source
10 tests that Mr. Walters provided. And one of those
11 three source tests, the Los Esteros source test,
12 when it is correctly adjusted to the same basis as
13 this project, shows that 40 percent of the
14 measurements exceed 3 pounds per hour.

15 Mr. Walters did not adjust his source
16 test to the firing rate that -- the higher heating
17 value firing rate for this project is 490 million
18 Btus an hour. The source test that he's relying
19 on were conducted at lower firing rates. When you
20 adjust the emissions to the same firing rate as
21 for this project, 40 percent of the Los Esteros
22 tests exceed 3 pounds an hour.

23 Q Thank you.

24 MR. JOSEPH: That's all the questions I
25 have.

1 HEARING OFFICER FAY: Anything further,
2 Mr. Thompson?

3 MR. THOMPSON: Nothing.

4 HEARING OFFICER FAY: Ms. DeCarlo?

5 MS. DeCARLO: If I could just clarify my
6 previous response. Staff would like to present a
7 little rebuttal testimony.

8 HEARING OFFICER FAY: But you have no
9 further questions?

10 MS. DeCARLO: None of this witness.

11 HEARING OFFICER FAY: Thank you, Dr.
12 Fox. Appreciate it.

13 You do have -- you will have rebuttal
14 testimony, you say?

15 MS. DeCARLO: Yes, just a couple follow-
16 up questions for Mr. Walters.

17 HEARING OFFICER FAY: Mr. Thompson, are
18 you ready to go?

19 MR. THOMPSON: I'm ready to go.

20 HEARING OFFICER FAY: Okay.

21 MR. THOMPSON: Mr. Fay, we're trying to
22 find a letter that was written by General Electric
23 Company when we inquired about the breadth of
24 their guarantee. And what I think it says is that
25 their guarantee of 3 parts per million --

1 MR. JOSEPH: Well, well, well, well --

2 MR. THOMPSON: -- solid over all
3 temperature ranges. Now, --

4 MR. JOSEPH: Are we going to take
5 evidence from the lawyers here? Are we going to
6 have some rules --

7 HEARING OFFICER FAY: Just -- Mr.
8 Joseph, --

9 MR. THOMPSON: Now, what I would like to
10 do is to find a way to get that letter into the
11 record because it seems to me that the best
12 evidence here is General Electric talking about
13 its guarantee.

14 HEARING OFFICER FAY: Well, you know,
15 there's a time and place for taking --

16 MR. JOSEPH: Mr. Fay, you issued an
17 order --

18 HEARING OFFICER FAY: -- evidence. And,
19 you know, you don't have somebody from GE to talk
20 about it, I don't know what you're going to do.

21 MR. JOSEPH: This issue has been on the
22 table since at least since our comments on the
23 draft initial study. There should be no reason
24 for anything new coming in on the subject that
25 wasn't filed by August 13th.

1 MR. THOMPSON: I guess I was just
2 incredulous that someone wouldn't believe that GE
3 wouldn't stand by its guarantee.

4 MR. JOSEPH: Well, Dr. Fox testified
5 that she was not saying they would not stand by
6 its guarantee, but the guarantee was good for 100
7 degrees Fahrenheit, which is not the temperature
8 this site --

9 HEARING OFFICER FAY: Okay, we're not
10 taking argument at this time. It's Mr. Thompson's
11 time to present his rebuttal testimony.

12 (Pause.)

13 Whereupon,

14 KARL LANY

15 was recalled as a witness herein, and having been
16 previously duly sworn, was examined and testified
17 further as follows:

18 DIRECT EXAMINATION

19 BY MR. THOMPSON:

20 Q Mr. Lany, would you please look at the
21 source tests on table 5 that are contained in
22 CURE's exhibit 25. Are you familiar with these
23 tests?

24 A Somewhat, yes. These tests were
25 conducted in the winter of 1997 by SCEC.

1 Q That's your company?

2 A Yes.

3 Q Can you give us any more information
4 about those tests?

5 A If you take a look at the table and see
6 that the tests were conducted, -- the first set of
7 tests which basically brought this issue to
8 attention. The first set of tests were conducted
9 using EPA method -- or excuse me, CARB method 5.
10 And they did show high particulate numbers.

11 I was unable to get a whole lot of
12 information about the test, itself, the test
13 manager who conducted the project is no longer
14 working with us. But we did talk with our senior
15 source testing person who gave us a little bit of
16 input on the test methods and what could have
17 happened, and what's appropriate, what's
18 inappropriate in this case.

19 Back in 1997 when these turbines were
20 tested, to be frank, there wasn't a whole lot of
21 permitting activity in gas-fired turbines in the
22 State of California. Local permitting agencies
23 were calling for test methods that may or may not
24 be appropriate in the situation was CARB method 5.

25 One of the things about it is that it

1 measures total particulates. It doesn't really
2 distinguish between PM10 or anything else that can
3 be found there.

4 Now, while you wouldn't expect to find
5 anything, a whole lot, at least about PM10, it
6 does draw to attention some other issues that can
7 come up during the actual sample collection. And
8 that is if there is an invalid sample collection
9 method, or a mistake during sample collection, you
10 stand a very good chance of the results being
11 elevated.

12 We're not talking about a sample of 3
13 pounds versus a sample of 3.5 pounds versus a
14 sample of a half pound. We're talking about
15 samples of grams, or in some cases grains,
16 extrapolated into, you know, a compliance
17 standard.

18 The other thing about CARB method 5 is
19 that the condensible portion of the sample is --
20 the method doesn't specify that the analysis
21 laboratory actual that whole condensible portion
22 and boil it down, if you will, to see what the
23 actual particulate is from the condensibles. It
24 requires only that a portion of it be extracted.
25 And here again it leaves a lot of room for error

1 in the extraction process to come up with these
2 results.

3 This does happen. You'll see that the
4 subsequent tests were called by alternative
5 methods. Methods that allowed segregation of PM10
6 versus total PM. And some methods that actually
7 insure that the whole sample is analyzed.

8 And you'll see that these subsequent
9 tests, one of which, the next set of tests that
10 were conducted just the following month, with the
11 different methods, and unfortunately for SCEC with
12 a different testing company, do show that indeed
13 there was compliance.

14 And we have seen consistently from this
15 point forward regardless of the test methods, that
16 we do consistently see results less than 3 pounds
17 per hour.

18 The other thing that, you know, is of
19 concern here, in some of these tests that you see
20 at the front end that show high results, there's a
21 relatively low test duration. The people that we
22 work with who do source testing really specify
23 that in many of these methods if you are going to
24 be doing low concentration particulate sampling,
25 you really have to rely on long sample durations.

1 We have people tell us eight hours.

2 But, certainly at a minimum we should be looking
3 at three, four hours of sample duration. We don't
4 see that here.

5 There is another one of the examples
6 here in the Carson project. Again, Carson is a
7 client of SCEC's. Our president, and again our
8 senior source testing person, called their
9 operations people to ask them about this test that
10 was cited on 11/1/96 that showed a high PM level.
11 They said they've never seen a test result at that
12 level, and they don't have a turbine called by
13 that name.

14 So, you know, again, we have to defer to
15 what we actually see in the field today. I know
16 one of the more recent results that we've seen in
17 the South Coast area, the South Coast test is by
18 their own method. And that is method 5.1, which
19 is really designed to be more appropriate for high
20 temperature testing than we would see in a peaking
21 operation.

22 We've seen that the Colton E.I. plant,
23 which is not a CEC project, but the equipment is
24 similar to what we're looking at here, we were
25 seeing source test results consistent with some of

1 the low numbers we're seeing here. I think about
2 .7.

3 When we had concerns about the GE
4 guarantees and how we would go into permitting, we
5 did ask GE to also produce other examples of what
6 they were seeing on LM6000s. And they were
7 consistently seeing results in the -- as low as
8 one-half pound per hour to 1.5 pounds per hour
9 consistently.

10 Q Mr. Lany, I believe that Dr. Fox
11 testified, and correct me if I'm wrong here, but
12 emission factors are the same for all combustion
13 turbines. Did you hear that?

14 A Yes, I did.

15 Q Do different gas turbines, combustion
16 turbines have different heat rates?

17 A Well, yes, they do. And we look at heat
18 rates differently, too. I think one of the
19 nuances that we have in South Coast is that this
20 is a fallout of the reclaim program, that when we
21 do permit we do assume a higher mean value of 1050
22 Btu per cubic foot. Whereas other districts and
23 EPA might have said something lower.

24 EPA, a lot of times, 1020, say, let me
25 take a look at the higher heat rate adjust. You

1 know, I don't know that our fuel is actually 50,
2 but that just becomes a permitting standard that
3 we use.

4 Q And finally, are these turbines going to
5 have chillers?

6 A Yes, they are.

7 Q And so from the turbine inlet will the
8 turbine, within certain bounds, generally see the
9 same temperature all the time?

10 A Generally, yes.

11 Q It's my understanding that South Coast
12 is looking at alternate ways of licensing. And
13 take your leave with your response here. Would
14 you discuss that for a minute?

15 A Yeah. As we've been discussing these
16 various issues with permitting staff at South
17 Coast, they have indicated that in response to
18 this particular issue, as they are investigating
19 it, themselves, to see if, in fact, it should have
20 a bearing on what we are permitting at the 3
21 pounds per hour, if indeed they do feel that there
22 is a risk of what they are proposing to do is
23 limit our fuel through-put based upon the 100
24 degree spec that we're looking at, and the factor
25 of 100 degrees, and limiting our annual fuel

1 consumption.

2 They're feeling that, in effect it
3 basically evens itself out over the year. They're
4 doing that basically for insurance that we would,
5 indeed, stay below the four tons per year on the
6 particulates.

7 MR. THOMPSON: That completes our
8 testimony, thank you.

9 HEARING OFFICER FAY: Thank you. Any
10 cross-examination?

11 MS. DeCARLO: No questions from staff.

12 HEARING OFFICER FAY: Mr. Joseph?

13 CROSS-EXAMINATION

14 BY MR. JOSEPH:

15 Q Mr. Lany, you criticized the source
16 tests that Dr. Fox relied on as being old. You
17 say a source test in March of 2003 is recent
18 enough to be reliable?

19 A I don't recall criticizing it because it
20 was old.

21 Q Well, you said they were done in 1997
22 when there wasn't much permitting activity going
23 on and they were using an improper test method.
24 And that since then you've seen better test
25 methods being used.

1 A I think that maybe there was a
2 misunderstanding of my intent here. Test methods
3 were called out that wouldn't necessarily be
4 applied today.

5 But what I was really getting at, also,
6 was the test companies, the local test companies
7 did not necessarily have the experience that they
8 have today with low concentration gas turbines.

9 Q Was your company competent when it
10 performed the test methods?

11 A Well, given the fact that another
12 company was called in to retest, I don't know what
13 happened in this test. I think that the project
14 owner suspected competence. However I will say
15 this. We haven't been tested again since.

16 Q Pardon?

17 A We haven't been tested again since.
18 With a different test manager.

19 MR. JOSEPH: I won't comment on the
20 number of applicant witnesses who've pleaded
21 incompetence. Just one moment, please.

22 (Pause.)

23 HEARING OFFICER FAY: Anything further,
24 Mr. Joseph?

25 MR. JOSEPH: Nothing further for this

1 witness, but we will ask Dr. Fox to respond.

2 HEARING OFFICER FAY: Okay. Ms.
3 DeCarlo.

4 MS. DeCARLO: Thank you. Staff would
5 like to recall Will Walters.
6 Whereupon,

7 WILLIAM WALTERS
8 was recalled as a witness herein, and having been
9 previously duly sworn, was examined and testified
10 further as follows:

11 DIRECT EXAMINATION
12 BY MS. DeCARLO:

13 Q Mr. Walters, will the applicant be
14 required to meet any permit limit to the
15 satisfaction of the South Coast Air Quality
16 Management District?

17 A Yes, they will. The source test
18 requirements are the requirements the District
19 will require. They will be required to meet any
20 emission permit limits per hour to South Coast's
21 satisfaction.

22 Q Is it your opinion that turbine
23 emissions have decreased over time as technology
24 has improved?

25 A Yeah, you can see that as evidenced if

1 you have seen the updates in the AP-42 factors
2 that have been cited previously, the NOx numbers
3 have rocketed down, other numbers have come down,
4 as well.

5 The intervenor indicates that fuel is
6 one of the main issues in terms of PM10, but it's
7 also the collection efficiency and how well
8 collection works.

9 And over time, with the general --
10 combustion cans in front of turbines have
11 improved. The NOx emissions have come down, the
12 other emissions have come down. And to say that
13 turbines that were built ten years ago would have
14 the same emissions as the turbines built today is
15 very unlikely.

16 Certainly the BACT requirements have
17 come way down and the emissions from the
18 (inaudible) come way down till the last ten years,
19 as have the assumptions on PM10 with the frame 7s
20 and other turbines.

21 Q Dr. Fox indicated that the source tests
22 on table 5 of her testimony were utilized by CARB.
23 Do you agree with this contention?

24 A Well, in looking through the CARB
25 appendix, and if people want to actually refer to

1 it, they can, it's tab number N in that really big
2 booklet.

3 And the source tests for PM10 are
4 identified on pages -- appendix C-48 and the only
5 test that I can find that was in table 5, and I'm
6 referring to the other exhibit, which is testimony
7 of Dr. Fox, were, in fact, the Carson tests of
8 9/95, 10/95, 11/96 and 11/96, missing the test
9 that was not dated in between the two 11/96, so I
10 assume it was also 11/96.

11 So they did not refer to the 6.05; they
12 referred specifically to all the tests that were
13 lower. They did not refer, at least specifically,
14 in any of these tables, any of the PG&E cogen.
15 And if you take a look at all of the data that's
16 presented here for LM6000s tests, which obviously
17 is not a lot, none are showing more than 3 pounds
18 an hour.

19 And all those tests were, in fact, done
20 quite awhile ago, which leads me to the conclusion
21 that the tests that are being identified here are
22 not what we would consider good tests. They were
23 tests done for various reasons, and in compliance
24 with the standards, because these would not be
25 compliant tests, were done later.

1 So when you see the lower tests later
2 those are probably the good tests. And those are
3 the ones that you should be looking at. And,
4 again, the 6.05 would be violating the PM10
5 requirements, and I'm sure that they had to do
6 whatever they had to do to either fix the test or
7 make sure that the combustion turbine was working
8 better.

9 As you can see on the previous page 46,
10 appendix C, the emission limit for the LM6000 at
11 Carson Energy is 2.5 pounds per hour. Again,
12 that's another lower emission limit than the
13 applicant is requesting on this case. That
14 emission limit was set into place probably when
15 the permitting was done -- well, it was issued in
16 '93, over ten years ago.

17 Q And just for the record, the appendix C
18 you referred to is contained in exhibit number 28.

19 To your knowledge has the Commission
20 ever found that offsets must be simultaneous and
21 at the potential source in order to be counted as
22 mitigating for the project impact?

23 A No. That would bring up some pretty
24 difficult things to do, like offsetting a
25 potential source, what if the source is a

1 greenfield site, you wouldn't be able to do
2 mitigation.

3 What we try to do is get the mitigation
4 in the same air basin; hopefully close to the
5 site. So you're mitigating regionally, which is
6 essentially what a mitigation is. It's for
7 regional ambient air quality standards for
8 attainment, for long-term mitigation.

9 On a daily basis the monitors don't
10 really show impacts from the site, itself, so
11 we're not really worried about instantaneous or
12 daily impacts. Numbers, you can see it in the
13 modeling results PM10 and otherwise, are very low.
14 And the impacts would not be, in and of
15 themselves, from that point of view, considered
16 significant.

17 We are only requiring mitigation to the
18 long-term attainment status. And making sure that
19 this project does not in any way delay the
20 attainment status of the area.

21 Q And does that conclude your testimony?

22 A Yes, it does.

23 MS. DeCARLO: The witness is available
24 for cross-examination.

25 HEARING OFFICER FAY: Mr. Thompson.

CROSS-EXAMINATION

BY MR. THOMPSON:

Q Mr. Walters, if you know, South Coast Air Quality Management District method 5.1, is that a testing method?

A I would have to agree it was a testing method for South Coast.

MR. THOMPSON: Okay, no other questions.

HEARING OFFICER FAY: All right. Mr. Joseph.

MR. JOSEPH: No questions.

HEARING OFFICER FAY: Does the Committee have any questions?

COMMISSIONER GEESMAN: No.

HEARING OFFICER FAY: All right. Mr. Joseph, you have rebuttal testimony?

MR. JOSEPH: Yes.

HEARING OFFICER FAY: While he's conferring with his witness, I'll just mention that there are some light snacks in the other room that the City was nice enough to provide for us.

MR. THOMPSON: Are they better than Southwest?

(Laughter.)

UNIDENTIFIED SPEAKER: Anything is

1 better than Southwest. That's off the record.

2 HEARING OFFICER FAY: There are
3 pretzels.

4 Off the record.

5 (Off the record.)

6 MR. JOSEPH: Shall we wait just one
7 second while they walk back in?

8 HEARING OFFICER FAY: It's up to you.
9 If you would rather wait, we'll wait for them.

10 (Off the record.)

11 Whereupon,

12 J. PHYLLIS FOX

13 was recalled as a witness herein, and having been
14 previously duly sworn, was examined and testified
15 further as follows:

16 DIRECT EXAMINATION

17 BY MR. JOSEPH:

18 Q Dr. Fox, there was testimony about the
19 current applicability of CARB test method 5. Do
20 you want to respond to that?

21 A That test method is still current and
22 still used.

23 Q Is it approved by any regulatory
24 agencies for continued use?

25 A I think it's approved -- it's SIP

1 approved.

2 Q Thank you. There was testimony about
3 the improved heat rate of turbines and the
4 improved combustion efficiency. Do you have a
5 comment on that topic?

6 A Yes. When I was testifying about the
7 fact that emission factors are the same for all
8 turbines, I was not referring to pounds per hour.
9 The emission rate is normally expressed in terms
10 of pounds per million Btu.

11 The AP-42 emission factor is, for
12 example, 0.066 pounds per million Btu. That
13 million Btu is the heat rate. So the emission
14 factor is normalized based on heat rate.
15 Therefore it doesn't matter what the heat rate or
16 the efficiency of a turbine is, because the
17 emission factor that's used in the calculation is
18 normalized to it.

19 Q You mean it doesn't matter for purposes
20 of calculating emissions. Obviously it does
21 matter in the real world?

22 A It doesn't matter for purposes of
23 calculating emissions. For example, this project
24 has a heat rate of 490 million Btus per hour based
25 on the higher heating value.

1 To calculate the PM10 emissions you
2 multiply the emission factor of 0.066 pounds per
3 million Btu by 490. You'll get a number bigger
4 than 3.0.

5 If we were dealing with a frame turbine
6 with a heat rate of 2000 million Btus per hour,
7 for example, you'd take that same emission factor
8 of .0066 (sic) pounds per million Btu and multiply
9 it by 2000, that would give you the emission rate
10 in pounds per hour.

11 It's important to keep in mind the
12 distinction between an emission factor normalized
13 to heat rate and the emission rate in pounds per
14 hour.

15 So all of my previous testimony was
16 going to the fact that the emission factor is
17 uniformly applied across the various ages and
18 types of turbines.

19 Q Dr. Fox, Mr. Walters just criticized
20 your statement that CARB has relied on this same
21 source test that you relied on. Do you have a
22 response to that?

23 A The report that Mr. Walters testified
24 from is not the report that I relied on.

25 Q And is there another report that

1 documents CARB's reliance?

2 A Yes. It's not, unfortunately, attached
3 to my testimony.

4 Q And Mr. Walters also testified about
5 turbines operating at different temperature. Have
6 you responded to that portion of the testimony?

7 A Someone testified to that. I thought it
8 was Mr. Lany, but, yeah, the comment was made that
9 the temperature that the turbine sees is the same.
10 I have many case studies prepared by GE for
11 similar LM6000 projects.

12 For example, the Roseville case, which
13 is currently before the Commission, is an example
14 in which they evaluate emissions for various
15 conditions, with the chiller on; with the chiller
16 off; and for low, average and high ambient
17 temperatures.

18 And the presence of the chiller does not
19 affect the fact that the emissions vary as a
20 function of the ambient temperature. For example,
21 at 100 degrees Fahrenheit, a typical PM10 emission
22 rate might be 2.8 to 3 pounds per hour with the
23 chiller on. And at 70 to 75 degrees Fahrenheit
24 with the chiller on, the PM10 emission rate would
25 be 3.1 pounds per hour.

1 So when I make that statement about the
2 effect of ambient temperature I'm comparing apples
3 to apples, chiller on in all cases.

4 Q And finally there's been several
5 different pieces of testimony criticizing your
6 reliance on various source tests.

7 Do you want to give a comprehensive
8 response to those various pieces of criticism?

9 A Well, if you just overlook -- well,
10 let's set aside those criticisms because they're
11 based on various methods and durations of tests.
12 And let's just look at what Mr. Walters relied on.

13 He presented source test data, three
14 sets of source test data. And I'm going to focus
15 on one of them, Los Esteros. And what I did with
16 Los Esteros, which was conducted in March of 2003,
17 and it was based on a long test duration. And it
18 was based on something other than CARB method 5.

19 And if you take those source tests data
20 that was presented by Mr. Walters, and you adjust
21 the measured emissions so that they're reported to
22 the same heat rate basis as this project, this is
23 what you get.

24 These are the emission measurements that
25 exceed 3 pounds per hour. The first reported one

1 is 3.8 pounds per hour; 3.5 pounds per hour; 3.4
2 pounds per hour; 3.2 pounds per hour; and 3.1
3 pounds per hour. There were five measurements
4 that were over 3.0 pounds per hour out of a total
5 of 15 measurements. That's 42 percent.

6 A permit limit has to be met 100 percent
7 of the time. It doesn't allow for 40 percent
8 exceedance.

9 So if you just set aside the source
10 tests that I relied on, and just focus on Los
11 Esteros, you can see that the PM10 emissions from
12 these turbines can and do exceed 3 pounds per
13 hour.

14 As to the criticisms, it was suggested
15 that some of the tests were done using CARB method
16 5 or EPA method 5, which measured total
17 particulate matter and not PM10. Well, it's
18 generally accepted that the particulate matter
19 from gas turbines is smaller than PM10. In fact,
20 it is frequently assumed that it's smaller than
21 PM2.5 or 2.5 microns.

22 Gas turbines don't emit particulate
23 matter which is large or greater than PM10. So
24 the fact that CARB method 5 or EPA method 5
25 measures total particulate matter is of no

1 consequence.

2 I actually agree with Mr. Lany that
3 source tests conducted over only 60 minutes,
4 that's probably too short for gas turbines.
5 Because the particulate matter of emissions are
6 pretty low, and the accuracy of the test depends
7 on the amount of material you collected. So it
8 would be preferable to run the source test for
9 more than 60 minutes.

10 Q Thank you.

11 MR. JOSEPH: That's all the questions I
12 have.

13 HEARING OFFICER FAY: All right. Any
14 cross, Mr. Thompson?

15 MR. THOMPSON: No cross. We have one
16 rebuttal question.

17 HEARING OFFICER FAY: Ms. DeCarlo?

18 MS. DeCARLO: No cross.

19 HEARING OFFICER FAY: Okay. What do you
20 mean, rebuttal question?

21 MR. THOMPSON: I have one question on
22 rebuttal for Mr. Lany.

23 HEARING OFFICER FAY: For Mr. Lany.

24 MR. THOMPSON: Now?

25 HEARING OFFICER FAY: Sure.

1 Whereupon,

2 KARL LANY

3 was recalled as a witness herein, and having been
4 previously duly sworn, was examined and testified
5 further as follows:

6 DIRECT EXAMINATION

7 BY MR. THOMPSON:

8 Q Mr. Lany, were you here present just a
9 minute ago when CURE testified that in reference
10 to Los Esteros and other turbines, that they
11 cannot meet their limits up to 42 percent of the
12 time?

13 A Yes, I was.

14 Q And emissions can and do exceed 3 pounds
15 per hour?

16 A Yes, I was.

17 MR. THOMPSON: We have an exhibit that
18 we would like to enter into if -- it's a letter
19 from General Electric to the City of Riverside
20 Public Utilities. Could we have the next exhibit
21 number in order, please?

22 MR. JOSEPH: Mr. Fay, I'm going to
23 object to this. This issue has been on the table
24 since our comments on the draft initial study.
25 There's no reason why ten hours into the last day

1 of hearing this letter should first appear. It
2 should have been part of the August 13th
3 testimony. There's no news about raising this.
4 And, you know, it's unfair to operate like this.

5 MR. THOMPSON: On the contrary, the new
6 testimony by Dr. Fox is that some of the turbines
7 that are very similar to this one can't meet the
8 permit limits 42 percent of the time. We think
9 that's totally false. And the best evidence of
10 that is the letter.

11 MR. JOSEPH: Further, Mr. Fay, I would
12 note the letter's dated August 6th, a week before
13 the applicant filed this testimony.

14 HEARING OFFICER FAY: Right. We're
15 going to mark it for identification as exhibit 33,
16 this letter from General Electric signed by Harry
17 Cotham. And what is your basis for introducing
18 this at this late time?

19 MR. THOMPSON: I was going to ask --
20 well, I was going to ask Mr. Lany if the
21 statements made by General Electric were the ones
22 that he relied on in his testimony regarding
23 emissions from the GE units.

24 MR. JOSEPH: Which is exactly why it
25 should have been part of the August 13th

1 testimony. If this is the document he relied on,
2 he should have produced it as all parties are
3 required to produce the documents, according to
4 the order of the Committee.

5 HEARING OFFICER FAY: Well, Mr. Lany,
6 lay your foundation for the letter. And please
7 explain why we haven't seen this before this time.

8 MR. THOMPSON: Mr. Lany hasn't seen it
9 too much before this time. I will say that
10 although it was dated August 6th, we did not get
11 it until a bit later than that.

12 Let me try this.

13 BY MR. THOMPSON:

14 Q Mr. Lany, you heard the testimony about
15 turbines that are very similar not meeting their
16 limits 42 percent of the time. Do you have any
17 reason to believe that the GE turbines that the
18 City of Riverside will be using will not meet its
19 emission limits?

20 A No, I don't.

21 Q And the basis of that is engineering
22 data that you received from Power Engineers,
23 who --

24 A The basis of it is various sources, one
25 of which is just what we have seen, ourselves, in

1 source tests, from a variety of turbines including
2 the LM6000s. And certainly this letter helps to
3 reinforce my position that GE is willing to
4 guarantee the 3 pounds per hour down to zero
5 degrees.

6 They are referencing a source test
7 method that's designed for high temperatures
8 sources like simple cycle turbines. And it is a
9 test method that includes both condensible and
10 filter particulates.

11 And the test method was in the engine
12 spec, and it is South Coast's standard turbine
13 test method.

14 MR. THOMPSON: That's all we have. I
15 would move exhibit 33 into the record.

16 HEARING OFFICER FAY: Well, CURE has
17 objected to receiving this into evidence. And I
18 haven't heard an explanation of why it didn't come
19 in before this time since it does speak directly
20 to one of the challenges that CURE made.

21 However, it's relevant, and I think
22 we're going to overrule the objection just in the
23 interests of having a complete record. I'm
24 disappointed in the applicant. I think we should
25 have seen this before they put it right in your

1 face challenging these various statements.

2 MR. THOMPSON: I appreciate your
3 concern, Mr. Fay. We have talked about the
4 General Electric guarantee, and talked about the
5 General Electric guarantee and what it covers. We
6 are frankly surprised that parties to a proceeding
7 would not -- would come to a conclusion that GE
8 would not meet its guarantees.

9 MR. JOSEPH: Mr. Fay, Mr. Thompson has
10 made that statement several times. And the
11 witness has clearly testified that's not what
12 we're saying.

13 HEARING OFFICER FAY: I understand.

14 MR. JOSEPH: We believe --

15 HEARING OFFICER FAY: I understand, Mr.
16 Joseph. That's not the issue.

17 Okay, does this conclude your rebuttal?

18 MR. THOMPSON: It does.

19 HEARING OFFICER FAY: Okay. Any
20 questions, Ms. DeCarlo, for Mr. Lany?

21 MS. DeCARLO: None.

22 HEARING OFFICER FAY: Mr. Joseph.

23 MR. JOSEPH: One question for Mr. Lany.

24 //

25 //

1 CROSS-EXAMINATION

2 BY MR. JOSEPH:

3 Q Who is Robert Gill?

4 A Robert Gill works for the City of
5 Riverside's Utility Department.

6 Q Is he present?

7 MR. GILL: Yes, I am.

8 MR. JOSEPH: Thank you. We'd like to
9 recall Dr. Fox to respond to the contents of this
10 letter.

11 HEARING OFFICER FAY: Okay.

12 Whereupon,

13 J. PHYLLIS FOX

14 was recalled as a witness herein, and having been
15 previously duly sworn, was examined and testified
16 further as follows:

17 DIRECT EXAMINATION

18 BY MR. JOSEPH:

19 Q Dr. Fox, did you testify that based on
20 the source tests you concluded that other projects
21 are in violation of their permits?22 A No, I did not testify that anybody was
23 in violation of their permit. And I did not
24 specifically testify that Los Esteros was in
25 violation of their permit limit.

1 Q What did you say?

2 A What I said is if you take the source
3 test data from Los Esteros, and the important
4 factor to understand here is that those source
5 tests were conducted at other than the peak firing
6 rate of this project, which is 490 million Btus
7 per hour, the source tests for Los Esteros were
8 conducted at lower firing rates.

9 So if you take those PM10 emission rates
10 in pounds per hour and you adjust them to the
11 proposed 3.0 pound per hour basis for this
12 project, what you will find is that five out of
13 the 15 tests are higher than 3.0 pounds per hour.

14 I presented no testimony on anybody
15 violating anything. I was merely demonstrating
16 that the source tests that Mr. Walters relied on,
17 if adjusted appropriately, it would show that the
18 proposed 3 pounds per hour for this project would
19 be exceeded.

20 And the reason that's important is a
21 permit limit is supposed to apply on a continuous
22 basis. In the case of PM10, you only look once a
23 year or less frequently. With other pollutants
24 like NOx and SO2, you have what's referred to as a
25 continuous emission monitoring system, or CEMS,

1 which continuously measures the emissions so that
2 you can tell on a continuous basis whether you're
3 in compliance with your permit limit or not.

4 That's not the case with PM10. And it's
5 a really important issue for PM10 because the
6 evidence suggests that the emissions, under
7 certain conditions, can be higher than the
8 proposed 3.0 pounds per hour. And there isn't any
9 way to find out.

10 A source test is only conducted once a
11 year or less frequently. And we don't know how
12 much less frequent it might be, because the South
13 Coast hasn't issued its permit yet. But usually
14 it's an annual source test.

15 And those source tests are conducted
16 under preplanned conditions. The source knows in
17 advance. They do all of the maintenance so
18 everything is in tip-top shape. And they dot all
19 the i's and cross all the t's so that they're sure
20 to comply with their permit limit.

21 That tells you nothing about what the
22 emissions are for the other 364 days per year when
23 the facility is operating at less than optimal or
24 peak conditions.

25 And another problem with the GE

1 guarantee, which is in my testimony, but I'd like
2 to refer you to it now, is I have the GE guarantee
3 from the application in my hand. It is in the
4 application; I believe it's the second page of
5 appendix A.

6 And it sets some very limited conditions
7 under which this 3.0 pounds per hour will be met.
8 There's a little box in the lower right-hand
9 corner of the guarantee. And it says: Conditions
10 for PM guarantee requires that each unit have
11 lower than 300 fired hours of operation prior to
12 testing."

13 "Also", and this is really important,
14 "Also, each unit must operate at baseload three to
15 four hours just prior to commencing PM10
16 compliance test." Well, that is not how a peaker
17 operates.

18 So, the whole framework for this GE
19 guarantee is a mismatch with the actual conditions
20 under which these turbines will operate.

21 And, as for this letter, this letter is
22 not the GE guarantee. The GE guarantee is this
23 second page of appendix A to the application. And
24 if there is a call on GE, for example, if it turns
25 out that the emissions are actually higher than

1 3.0 pounds per hour, it is not this August 6th
2 letter which was just put in the record that GE
3 will rely on. They will go to this official
4 guarantee, which is signed by a different person.
5 This is the guarantee that will be backed. And
6 that guarantee says 100 degrees Fahrenheit.

7 And then finally I'd like to point out
8 to you that the guarantee is based on South Coast
9 method 5.1. The other similar projects that have
10 been permitted in the South Coast rely on South
11 Coast method 5.2. It's a different test method.

12 And this method allows either total
13 emissions or just filterable to be measured. And
14 there's no way to tell from this guarantee which
15 part of the method will actually be used.

16 Q Thank you, Dr. Fox.

17 HEARING OFFICER FAY: Mr. Thompson, do
18 you have any cross-examination of Dr. Fox?

19 MR. THOMPSON: Could you give me a
20 minute? There's a lot of new stuff.

21 HEARING OFFICER FAY: Okay.

22 (Pause.)

23 CROSS-EXAMINATION

24 BY MR. THOMPSON:

25 Q You mentioned the test 5.2 in addition

1 to 5.1?

2 A The South Coast has two PM methods, 5.1
3 and 5.2. And in the permits that I've seen issued
4 on other LM6000 turbines they have required 5.2.

5 Q And it was not the case then that 5.2
6 was replaced by 5.1?

7 A I'm not aware that one replaces the
8 other. They're both current.

9 MR. THOMPSON: That's all we have.

10 HEARING OFFICER FAY: Ms. DeCarlo?

11 CROSS-EXAMINATION

12 BY MS. DeCARLO:

13 Q Were those LM6000s you're referring to
14 under test method 5.2, were those operated in
15 simple cycle mode?

16 A Yes, they were peakers.

17 Q And what's the difference between the
18 two tests?

19 A Without having them both in front of me
20 and going through them I can't tell you.

21 Q So all you know is that in the previous
22 instances 5.2 has been required, --

23 A Yes.

24 Q -- but you don't know why or on what
25 basis or what the difference is?

1 A That's correct. As I stand here, I
2 don't know why. And unless I have the two methods
3 in front of me, I couldn't contrast them for you.

4 MS. DeCARLO: No further questions.

5 HEARING OFFICER FAY: All right. Mr.
6 Joseph?

7 MR. JOSEPH: Nothing further.

8 HEARING OFFICER FAY: Okay. Thank you,
9 Dr. Fox.

10 That concludes taking testimony on the
11 operational aspects of air quality.

12 As I told the parties, we're going to
13 have briefs due. The transcripts are expected on,
14 I believe I said the 8th or 9th. Okay, the court
15 reporter confirms that the transcripts will be out
16 September 8th. If that's the case, then the
17 opening briefs will be due September 22nd, two
18 weeks later. And say ten days later for the reply
19 briefs. Is that -- can the parties live with
20 that?

21 MR. JOSEPH: Except that ten days later
22 is a Saturday.

23 HEARING OFFICER FAY: Is it Saturday or
24 Sunday? October 4th would be the next business
25 day.

1 MR. JOSEPH: That would be good.

2 HEARING OFFICER FAY: So, reply briefs
3 due October 4th. Any questions about that?

4 MS. DeCARLO: Will the Committee be
5 issuing an order as to what it wants, what issues
6 it wants the parties to brief? Or is it up to the
7 parties to determine?

8 HEARING OFFICER FAY: I think it's up to
9 the parties to determine what they want to cover.

10 MS. DeCARLO: Okay.

11 HEARING OFFICER FAY: I assume that if
12 they have any concerns about the legal standard
13 being applied, if you think any questions are
14 still open about that, address that, as well.

15 Any other questions? Okay. Again,
16 there's snacks in the other room. Thank you, all.
17 We're adjourned.

18 (Whereupon, at 7:11 p.m., the hearing
19 was adjourned.)

20 --o0o--

21

22

23

24

25

CERTIFICATE OF REPORTER

I, JAMES RAMOS, an Electronic Reporter,
do hereby certify that I am a disinterested person
herein; that I recorded the foregoing California
Energy Commission Hearing; that it was thereafter
transcribed into typewriting.

I further certify that I am not of
counsel or attorney for any of the parties to said
hearing, nor in any way interested in outcome of
said hearing.

IN WITNESS WHEREOF, I have hereunto set
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